PRINCIPLES OF ACCOUNTING

ADVANCED

by

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PREFACE

IT IS now somewhat more than ten years since the publication of the first edition of *Principles of Accounting*. Those familiar with the original edition will find that, in the present revision, the sequence of subjects has been considerably changed; the treatment of several subjects has been amplified; certain other subjects, many of which are now dealt with in the author's *Principles of Accounting, Introductory*, have been omitted, or the space devoted to them has been reduced; and all problems and questions have been allocated to the chapters to which they primarily pertain

Grateful recognition is here given to those who have taught from the original edition and who responded to the author's request for suggestions as to this revision.

If the names of persons or companies in this book bear any similarity to those of actual persons or companies, the similarity is fortuitous.

H. A. FINNEY

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CHAPTER 31

PARTNERSHIPS

Organization

Definitions.—"A partnership," as defined by the Uniform Partnership Act, "is an association of two or more persons to carry on, as co-owners, a business for profit."

A partnership may be spoken of as a firm, but it should not be called a company, as the latter term applies only to corporations.

A joint stock company is a partnership, the capital interests of which are represented by transferable shares. Joint stock companies may be organized in some states under the common law, and in others under special statutes governing their organization and operation.

In a limited partnership, the limited partners have no personal liability to creditors, but they must maintain their investments at the amounts stipulated at the time of organization. There must be at least one general partner who is liable to creditors for debts which cannot be paid from the firm assets. Limited partnerships are not permissible in all states.

Articles of partnership.—The partnership relation is based on a contract between the partners. This contract may be either express or implied.

If two or more persons actually engage in business together as co-owners without making an express agreement, orally or in writing, the law implies a contract, and a partnership exists. It is advisable, however, that the contract be reduced to writing and signed by the partners, so that disputes may be avoided so far as possible. It is desirable that the articles of partnership contain express agreements on the following matters.

The names of the partners, and the name of the partnership.

The date on which the partnership contract takes effect.

The nature and place of business.

The capital to be contributed by each partner; any interest charges to be made for failure to contribute the agreed amounts; and the treatment (as capital or loan) of any contributions in excess of the agreed amounts.

Any division of authority among the partners, if such division of authority is desired.

The dates on which profits or losses are to be computed, and the method to be followed in dividing them.

The drawings or salaries to be allowed. A clear statement should be made regarding the disposition of the partners' Drawing or Salary accounts, so that there can be no dispute as to whether such accounts are to be closed to Profit and Loss or to the respective Capital accounts.

The length of time the partnership is to continue, and an agreement concerning the method of liquidating the partnership at the termination of the agreed time. It is also advisable to include an agreement covering the contingency of a partner's death. This agreement should stipulate when and how the deceased partner's interest in the capital should be computed and paid to his estate, and whether any allowance should be made for goodwill. Similar provisions may be made with respect to a partner's retirement.

It may also be desirable to provide for the selection of arbitrators to whom the partners may submit disputes which they themselves are unable to settle.

Division of Profits

Closing the books.—The net profits shown by the Profit and Loss account should be transferred to the partners' accounts. There is no Surplus account on the books of a partnership. Such an account is unnecessary because each partner has an account to which his share of the profits may be credited. Moreover, it would be unwise to use a Surplus account and thus defer the division of profits, because, if the profit and loss ratio changed from one period to another, the Surplus account would contain accumulated profits divisible in different ratios.

The Profit and Loss account and the partners' Drawing accounts may be closed by various methods, as outlined below.

(A) Close the Profit and Loss account to the partners' Drawing accounts.

In favor of this method, it may be said that drawings are assumed to be made against accruing profits; if the profits are closed to the Drawing accounts, each partner's Drawing account will show whether he has drawn more or less than his share of the profit.

After the Profit and Loss account is closed to the Drawing accounts, the disposition of the Drawing accounts should depend upon whether the partners have agreed to maintain fixed capital investments.

(1) If there is an agreement with respect to fixed capital investments, and if.

(a) A partner is keeping the agreed amount at the credit of his Capital account, a credit balance in his Drawing account (representing the undrawn portion of his share of the profit) may be left in the Drawing account. But if:

(b) A partner is not keeping the agreed amount at the credit of his Capital account, enough of the credit balance in his Drawing account should be transferred to his Capital account to make good the impairment of capital; and a debit balance in the Drawing account should be transferred in full to the Capital account, to reflect the further impairment of capital.

(2) If there is no agreement with respect to fixed capital investments, debit or credit balances in the Drawing accounts may be closed to the Capital accounts in order that the Capital account balances will show the partners' net investments at the end of the period.

(B) Close the Profit and Loss account to the partners' Capital accounts, and close the Drawing accounts to the respective Capital accounts.

This method has the advantage of showing in one account all of the changes in the partners' capitals resulting from investments, drawings, profits, and losses. However, it is not a desirable method for use in a partnership in which a distinction is to be made between fixed capital investments and undrawn balances of profits.

Bases of division of profits.—If the partners make no agreement regarding the method of dividing profits, the law provides that the profits shall be divided equally, regardless of any differences in capital investments, business ability, or time devoted to the business. The partners may, however, make any agreement they wish. Some of the customary methods of dividing profits are:

(1) Equally.
(2) In an arbitrary ratio.
(3) In the capital ratio.
(4) In the average capital ratio.
(5) By allowing interest on capitals and dividing the remaining profit in an agreed ratio.
(6) By allowing salaries to the partners and dividing the remaining profit in an agreed ratio.

Equal division.—Assume that *A* and *B* make a profit of $11,484 00, and that it is to be divided equally, either because of an agreement to that effect or because of a failure to make any agreement. Each will be credited with $5,742.00.

Arbitrary ratio.—Arbitrary ratios are usually expressed in terms of fractions or per cents. If the profits of $11,484 00 are to be divided in the ratio of two fifths to *A* and three fifths to *B*, the division will be as follows:

Summary of Division of Profit

Partner	Ratio	Amount
A	2/5	$ 4,593 60
B	3/5	6,890 40
Total		$11,484 00

It is sometimes agreed that a portion of the profits shall be divided in one ratio and the remainder in another. To illustrate, assume that the first $8,000.00 of profit is to be divided in the ratio of two fifths to *A* and three fifths to *B*, and that the profits in excess of $8,000.00 are to be divided equally. The division should be made as follows:

Summary of Division of Profit

	A	*B*	Together
First $8,000 00 in ratio of 2/5 and 3/5	$3,200 00	$4,800 00	$ 8,000 00
Remainder equally	1,742 00	1,742 00	3,484 00
Total	$4,942 00	$6,542 00	$11,484 00

Capital ratio.—If partners desire to divide their profits in the capital ratio, they should have a definite agreement as to whether the ratio at the beginning of the period or the ratio at the end of the period is to govern. Otherwise, disputes may arise because investments and drawings during the period may change the capital ratio.

To illustrate, assume that *A* and *B* invested $10,000.00 and $20,000.00, respectively, on January 1, that each partner was permitted to draw $200.00 per month against accruing profits, to be charged to his Drawing account; and that drawings in excess of that amount were to be charged to the Capital accounts. The following accounts show the original investments, the additional investments, and the drawings in excess of $200.00 per month.

A, Capital

Feb 1	100	Jan 1	10,000
Aug 1	500	Sept 1	2,000
Nov 1	200		

B, Capital

Mar 1	300	Jan 1	20,000
Aug 1	200	July 1	4,000
Sept 1	300		

The profits for the year were $11,484.00.

If it was agreed that the profits were to be divided in the ratio of the capitals at the beginning of the year, the division should be as follows:

Summary of Division of Profit

Partner	Opening Capital Balance	Ratio	Profit
A	$10,000 00	1/3	$ 3,828 00
B	20,000 00	2/3	7,656 00
Total			$11,484 00

If the profits were to be divided in the ratio of the capitals at the end of the year, the division should be as follows:

Summary of Division of Profit

Partner	Closing Capital Balance	Ratio	Profit
A	\$11,200 00	$112/344$	\$ 3,738 98
B	23,200.00	$232/344$	7,745 02
Total	.	. .	\$11,484 00

Average capital ratio.—If partners agree to divide the profits in a capital ratio, it is presumably because they believe that their shares in the profits should be proportionate to the capital contributions furnished for the use of the business during the period. Obviously, neither the capital balances at the beginning of the period nor those at the end represent the capital used by the business during the period. To be entirely fair, consideration should be given not only to the amounts of the balances but also to the time during which the balances remained invested. This may be accomplished by dividing the profits in the average capital ratio.

When the average capital ratio is used, the partners should have an agreement regarding the amount of drawings which each partner is to be allowed. These agreed drawings should be charged to the Drawing accounts, and any drawings in excess of the agreed amounts should be charged to the Capital accounts, as they should affect the computation of the average capital ratio.

The average capital ratio may be computed by either of two methods.

First method.—

Multiply each partner's contributions by the number of months (or days) from the date of the contribution to the end of the period.

Add these products.

Multiply each partner's withdrawals (charged to capital) by the number of months (or days) from the date of the withdrawal to the end of the period.

Add these products.

Deduct the withdrawal products from the contribution products.

Divide the profits in the ratio of the resulting balances.

For purposes of illustration, we may use the Capital accounts of A and B appearing in the preceding section. Following is the computation of the average capital ratio, and a statement of the division of the profit.

Computation of Average Capital Ratio

	Date	Amount	Months to Dec 31	Products	Sum of Products	Balances
A, Capital						
Credits.	Jan 1	10,000 00	12	120,000 00		
	Sept 1	2,000 00	4	8,000 00	128,000 00	
Debits	Feb 1	100 00	11	1,100 00		
	Aug. 1	500 00	5	2,500 00		
	Nov. 1	200 00	2	400 00	4,000 00	124,000 00
B, Capital						
Credits	Jan 1	20,000 00	12	240,000 00		
	July 1	4,000 00	6	24,000 00	264,000 00	
Debits	Mar 1	300 00	10	3,000 00		
	Aug 1	200 00	5	1,000 00		
	Sept 1	300 00	4	1,200 00	5,200 00	258,800 00
	Total					382,800 00

Division of Profit

Partner	Fraction	Profits
A	1240/3828	$ 3,720 00
B	2588/3828	7,764 00
Total		$11,484 00

The preceding computation determines the *ratio* between the average capitals, but it does not determine the average capitals. To compute the average capitals, it would be necessary to divide each of the two balances by 12, thus.

A \$124,000 00 − 12 = \$10,333 33, Average capital
B 258,800 00 − 12 = 21,566 67, " "

The division by 12 is useless, however, because all that is required is the ratio between the average capitals, not the average capitals themselves. The ratio between \$124,000.00 and \$258,800.00 is the same as the ratio between \$10,333.33 and \$21,566.67. In fact, the division by 12 is worse than useless, because the fractions 1240/3828 and 2588/3828 are more easily dealt with than the fractions 10,333.33/31,900.00 and 21,566 67/31,900.00.

Second method.—

Multiply each new capital account balance (resulting

from an investment or a withdrawal) by the number of months or days the balance remained unchanged
Find the sum of these products.
Divide the profits in the ratio of these sums.

Computation of Average Capital Ratio

	Date	Debits	Credits	Balance	Time Unchanged	Products
A, Capital.	Jan. 1		10,000 00	10,000 00	1 mo	10,000 00
	Feb. 1	100 00		9,900 00	6 mos	59,400 00
	Aug 1	500 00		9,400 00	1 mo	9,400 00
	Sept. 1		2,000 00	11,400 00	2 mos	22,800 00
	Nov 1	200 00		11,200 00	2 mos	22,400 00
	Total				12 mos	124,000 00
B, Capital	Jan 1		20,000 00	20,000 00	2 mos	40,000 00
	Mar 1	300.00		19,700 00	4 mos	78,800 00
	July 1		4,000.00	23,700 00	1 mo	23,700 00
	Aug 1	200 00		23,500 00	1 mo	23,500 00
	Sept 1	300 00		23,200 00	4 mos	92,800 00
	Total				12 mos	258,800.00

This method produces the same results as the first method, and has two advantages. First, the final amount in the Balance column should agree with the balance of the account, and thus prove the accuracy of the various balances; and second, the figures in the Time Unchanged column should add to a full year, and thus prove the accuracy of the multipliers.

In this illustration, all investments and withdrawals were made on the first day of some month. If investments and withdrawals are made during the month, the partners may agree that all investments and withdrawals shall date as from the first of the month; or that all shall date as from the end of the month; or that entries during the first half of the month shall date from the first day of the month, and entries during the last half of the month shall date from the last day of the month. Or the actual number of days may be used, as in the following illustration:

	Date	Debits	Credits	Balance	Time	Products
X, Capital·	Jan 1		5,000 00	5,000 00	66 days	330,000 00
	Mar 8	600 00		4,400.00	150 "	660,000 00
	Aug 5	320.00		4,080 00	33 "	134,640 00
	Sept. 7		1,500 00	5,580 00	72 "	401,760 00
	Nov. 18	200 00		5,380 00	44 "	236,720 00
	Total				365, "	1,763,120 00

Interest on capital.—When the profits are divided in the ratio of the capitals at the beginning of the period, the capitals at the end of the period, or the average capitals, the entire profit distribution is based on the capital investments. Since capital is only one factor in the production of profits, it may be desired to distribute only a portion of the profit in the capital ratio and the remainder in some other ratio. This may be accomplished by:

Allowing interest on the capitals, thus dividing a portion of the profit in the capital ratio; and

Dividing the remainder of the profit in some other ratio.

If interest is to be allowed on capitals, the partnership agreement should contain definite provisions concerning the basis of the computation of the interest. Using the Capital accounts of *A* and *B* on page 5 and assuming that profits, after allowing 6% interest on capitals, are to be divided equally, the following methods of allowing interest may be illustrated:

(1) Each partner is credited with interest for the entire period on the opening balance in his Capital account.

Summary of Division of Profit

	A	*B*	Together
Interest on opening capital balances.			
A—6% of $10,000 00	$ 600 00		
B—6% of $20,000 00		$1,200 00	
Total interest			$ 1,800 00
Remainder equally	4,842 00	4,842 00	9,684 00
Total	$5,442 00	$6,042 00	$11,484 00

(2) Each partner is credited with interest for the entire period on the closing balance in his Capital account.

Summary of Division of Profit

	A	*B*	Together
Interest on closing capital balances			
A—6% of $11,200 00	$ 672 00		
B—6% of $23,200.00		$1,392 00	
Total interest			$ 2,064 00
Remainder equally	4,710 00	4,710 00	9,420 00
Total	$5,382 00	$6,102 00	$11,484 00

(3) Each partner is credited with interest for the entire period on his average capital balance. This basis

is obviously more equitable than either the opening or the closing balance. The computation of the average capital balances is shown on page 7.

Summary of Division of Profit

	A	*B*	Together
Interest on average capital balances			
A—6 % of $10,333 33	$ 620 00		
B—6 % of $21,566 67		$1,294 00	
Total interest			$ 1,914 00
Remainder equally	4,785 00	4,785 00	9,570 00
Total	$5,405 00	$6,079 00	$11,484 00

(4) Interest is computed on each credit and each debit in the Capital accounts from the date thereof to the end of the period. This method produces the same results as those obtained by method 3, as shown by the following computation of the net interest credits.

A	Investments—	$10,000 00 for 12 months	$ 600 00		
		2,000 00 " 4 "	40 00	$ 640 00	
	Withdrawals—	100 00 " 11 "	$ 5 50		
		500 00 " 5 "	12 50		
		200 00 " 2 "	2 00	20 00	
	Net credit for interest			$ 620 00	
B	Investments—	$20,000 00 " 12 "	$1,200 00		
		4,000 00 " 6 "	120 00	$1,320 00	
	Withdrawals—	300 00 " 10 "	$ 15 00		
		200 00 " 5 "	5 00		
		300 00 " 4 "	6 00	26 00	
	Net credit for interest			$1,294 00	

It is obvious that, if interest is computed by either of the last three methods illustrated, the partners' interest credits are affected by debits in their Capital accounts. Therefore, if either of these methods is used, there should be a definite agreement with respect to withdrawals to be charged to the Capital accounts.

Object of interest on capital.—It should be noted that interest on capitals is really a division of a portion of the profits in the capital ratio, and the object of allowing interest on capital is to make a partial division of the profits in the capital ratio. Therefore it should be evident that there is

no object in allowing interest on capitals if the remaining profits are also to be divided in the capital ratio.

Interest on partners' accounts.—Partners may have Capital, Drawing, and Loan accounts. Two questions arise in connection with interest on these accounts:

(1) Is interest to be charged or credited on these accounts, in the absence of an express agreement?
(2) Where should interest on these accounts appear in the profit and loss statement?

As to the first question, a partner cannot claim interest on his capital unless there has been an agreement to that effect, for the law assumes that the investment was made for the purpose of earning profits and not interest. Nor can the partnership charge interest on a Drawing account when there has been no agreement to allow such a charge. And this rule holds even though the partner has drawn more than the agreed amount. But the rule is different in regard to loans. If a partner has contributed the agreed amount to the firm capital and made a loan in addition, the law considers him to be an outside creditor so far as the loan is concerned, and presumes that he made the loan with the expectation of receiving interest thereon.

As to the second question, interest on capital should be shown in the profit and loss statement as a division of profits. If interest is charged on drawings without being credited on capitals, the charge to the partners should be reflected as financial income in the profit and loss statement, if interest is credited on capitals and charged on drawings, the net amount should be shown as a division of profits. Interest on partners' loans should be shown as a financial expense.

Salaries to partners.—The relative value of the partners' services may be recognized by allowing salaries to the partners. The salaries may be paid monthly or at other intervals during the year; they may be credited at intervals to the partners' Drawing accounts as an offset against drawings taken from time to time, or they may be paid or credited in total at the end of the period. If the salaries are paid or credited at intervals throughout the period, they should be charged to the Partners' Salaries accounts; if paid or

credited in total at the end of the period, they may be charged to Partners' Salaries or direct to Profit and Loss.

One illustration should suffice. The Profit and Loss account of the firm of X and Y contains a credit balance of \$10,000.00, before closing the following salary accounts, which represent salaries paid to the partners during the year:

X, Salary	\$1,200 00
Y, Salary	3,000 00

The net profit, after the deduction of partners' salaries, is to be divided equally. The closing entries should be:

Profit and Loss	4,200 00	
X, Salary		1,200 00
Y, Salary		3,000 00
To close the salary accounts		
Profit and Loss	5,800 00	
X, Capital		2,900 00
Y, Capital		2,900 00
To divide the remaining profits equally		

Salaries and drawings.—The partnership agreement should definitely state whether the amounts which partners are allowed to draw during the period are to be considered as salaries or drawings. This agreement is important because it affects the distribution of the profits, for salaries are chargeable to the Profit and Loss account whereas drawings are chargeable to the respective Capital accounts.

Referring to the preceding illustration, if the amounts drawn by X and Y during the year were salaries, chargeable to Profit and Loss, their respective shares in the total profit of \$10,000.00 would be as follows:

		X	Y	Together
Amounts taken during the year as salaries		\$1,200 00	\$3,000 00	\$ 4,200 00
Profits divided equally				
Total profit before salaries.	\$10,000 00			
Less salaries.	4,200 00			
Remainder—net profit.	\$ 5,800 00			
Divided equally		2,900 00	2,900 00	5,800 00
Total shares		\$4,100 00	\$5,900 00	\$10,000 00

But if the amounts drawn by X and Y during the year were drawings, to be closed to the respective Capital accounts, their shares in the total profit of \$10,000.00 would be:

	X	Y	Together
Equal division of total profit	\$5,000 00	\$5,000 00	\$10,000 00

The point may perhaps be made clearer if we compare the amounts which each partner is entitled to receive at the end of the year by the two methods.

	X	Y
If the amounts taken were drawings, the partners are entitled to receive at the end of the year		
One half of total profits	\$5,000 00	\$5,000 00
Less amounts already drawn against their shares of profit . .	1,200 00	3,000 00
Remainder	\$3,800 00	\$2,000 00
If the amounts drawn were salaries, each partner is entitled to receive one half of the balance in the Profit and Loss account after closing the Salary accounts to that account, or	\$2,900 00	\$2,900 00

Obviously, *X* will prefer to have the amounts drawn during the year regarded as drawings, while *Y* will prefer to have them regarded as salaries. With such conflicting interests, it is evident that a dispute might easily arise in the absence of a specific agreement.

Partners' interest and salaries in the profit and loss statement.—There is some difference of opinion among accountants as to whether interest on capital and salaries to partners should be shown in the profit and loss statement as expenses or as divisions of profit.

To illustrate, by means of condensed statements, should interest and salaries be shown as expenses (as in the first statement) or as divisions of profits (as in the second statement)?

As expenses:

A* AND *B

Profit and Loss Statement

For the Year Ended December 31, 1933

Sales		\$60,000 00
Less Cost of Goods Sold		40,000 00
Gross Profit on Sales		\$20,000 00
Deduct Operating Expenses	\$8,000 00	
Partners' Salaries	6,000 00	14,000 00
Net Profit from Operations		\$ 6,000 00
Deduct Interest on Partners' Capitals		1,200 00
Net Profit for the Year		\$ 4,800 00
Distributed as Follows		
A ½	\$2,400 00	
B ½	2,400 00	
Total	\$4,800 00	

As divisions of profits·

A AND B
Profit and Loss Statement
For the Year Ended December 31, 1933

Sales			$60,000 00
Less Cost of Goods Sold			40,000 00
Gross Profit on Sales			$20,000 00
Deduct Operating Expenses			8,000 00
Net Profit for the Year			$12,000 00
	A	*B*	Together
Distributed as Follows			
Salaries	$4,000 00	$2,000 00	$ 6,000 00
Interest on Capitals	400 00	800 00	1,200 00
Balance Equally	2,400 00	2,400 00	4,800 00
Total	$6,800 00	$5,200 00	$12,000 00

From a purely theoretical standpoint, it seems that partners' salaries and interest on partners' capitals are both divisions of profits. Partners are supposed to contribute capital and services for the purpose of producing partnership profits; and interest and salaries are merely devices for distributing profits in proportion to the amount of the capital and the value of the services contributed.

But in practice it is not unusual to show the partners' salaries as an expense, and the interest on capital as a division of profits.

Interest and/or salaries in excess of profits.—If the partnership agreement provides for interest on capitals without any stipulation as to what shall be done if the profits are less than the interest or if the operations result in a loss, the interest must be charged to Profit and Loss and credited to the partners' Capitals in accordance with the agreement, and the resulting debit balance in the Profit and Loss account must be charged to the Capital accounts.

The same rule holds with respect to partners' salaries; the agreed salaries must be charged to Profit and Loss and credited to the partners or paid to them, regardless of the amount of the profit or the loss. The following illustrations dealing with interest on partners' capitals should therefore be understood to apply equally to partners' salaries.

A and *B* have capitals of $10,000.00 and $20,000.00, respectively. Their partnership agreement provides that

"interest shall be allowed on capitals at 6% per annum, and remaining profits shall be divided equally"

If the profits are $8,000.00, they should be divided as as follows:

	A	B	Together
Credits for interest	$ 600 00	$1,200 00	$1,800 00
Balance divided equally	3,100 00	3,100 00	6,200 00
Total	$3,700 00	$4,300 00	$8,000 00

If the profits are only $1,000 00, which is less than the interest credits, the division should be made as follows.

		A	B	Together
Credits for interest		$600 00	$1,200.00	$1,800 00
Resulting debit balance of Profit and Loss account—divided equally				
Net profit	$1,000 00			
Less debits for interest	1,800 00			
Debit balance of P & L	$ 800 00	400 00	400 00	800 00
Net credits to partners		$200 00	$ 800 00	$1,000 00

If there is a loss of $1,000.00, the division should be:

		A	B	Together
Credits for interest		$ 600 00	$1,200 00	$1,800 00
Resulting debit balance of Profit and Loss account—divided equally				
Net loss	$1,000 00			
Add debits for interest	1,800 00			
Total.	$2,800 00	1,400 00	1,400 00	2,800 00
Net division of loss		$ 800 00	$ 200 00	$1,000 00

Compliance with the partnership agreement may result in giving one partner a net credit, although the business operations resulted in a loss For instance, if the loss was $400.00, the division should be made as follows.

		A	B	Together
Credits for interest		$ 600 00	$1,200 00	$1,800 00
Resulting debit balance of Profit and Loss account—divided equally				
Net loss	$ 400 00			
Debits for interest	1,800 00			
Total	$2,200 00	1,100 00	1,100 00	2,200 00
Net division		$ 500 00 Dr	$ 100 00 Cr	$ 400 00 Dr.

If the partners wish to avoid distributions of the kind just illustrated, they must make express stipulations covering the contingency of a loss, or of profits which are less than the

interest. Such an agreement might be worded as follows: "Interest at 6% per annum shall be allowed on capitals, provided the profits exceed such interest credits; and the remaining profits shall be divided equally. In the event that the profits are less than interest on the capitals at 6% per annum, such profits as are made shall be divided in the capital ratio. Any loss shall be divided equally."

Applying this agreement to the illustration with profits of only $1,000.00, which was less than the interest, the division should be made in the capital ratio of one third and two thirds, or $333.33 to *A* and $666 67 to *B*. In the case of a $1,000.00 loss, $500.00 should be charged to each.

The important thing to note is that, if the partnership agreement provides for interest on capitals or for partners' salaries, the agreement is unqualified. The salaries or the interest must be allowed to the partners regardless of the amount of the profit or loss, and any resulting debit balance in the Profit and Loss account must be divided in the ratio stated as applying to the division of remaining profits.

Bonus to a partner.—When one partner manages the business, a special compensation may be allowed to him, in the form of a bonus based on the profits. Bonus agreements should state definitely whether the bonus is to be considered an expense or a distribution of profits. In other words, the agreement should specify whether the profits are to be considered net before or after the bonus is deducted.

To illustrate the difficulties which may arise if the agreement does not specifically cover this point, assume that *A* and *B* are partners; that *A* is to be allowed a bonus of 20% of the profits; and that remaining profits are to be divided equally The Profit and Loss account shows a credit balance of $5,000.00.

If the bonus is not to be considered an expense and the profits are assumed to be net before the bonus is deducted, the distribution will be.

	A	*B*	Together
Bonus to *A* 20% of $5,000 00	$1,000 00		$1,000 00
Balance equally	2,000 00	$2,000 00	4,000 00
Total	$3,000 00	$2,000 00	$5,000 00

On the other hand, if the bonus is to be considered an

expense, the net profits are not \$5,000.00, but \$5,000.00 minus the bonus. The computation of the bonus and the distribution of the profits would be made as follows.

Let net profits = 100%
And bonus = 20%
Then \$5,000 00 = 120% of net profits
\$5,000 00 − 120% = \$4,166 67, the net profit

	A	*B*	Together
Bonus to *A* 20% of \$4,166 67	\$ 833 33		\$ 833 33
Balance equally	2,083 33	\$2,083 34	4,166 67
Total	\$2,916 66	\$2,083 34	\$5,000 00

Statement of partners' capitals.—The increases and decreases in partners' net investments during the period are shown by a statement of partners' capitals To illustrate the form, assume the following facts for the year 1934.

Partner *A*		
Capital account		
Credit balance at beginning of year		\$20,000 00
Additional investments during the year		3,000 00
Debits for drawings in excess of agreed monthly drawings of \$200 00	\$1,500 00	
Drawing account debits for monthly drawings	2,400 00	
Partner *B*		
Capital account:		
Credit balance at beginning of year		15,000 00
Additional investments during the year		2,500 00
Debits for drawings in excess of agreed monthly drawings of \$200 00	1,000 00	
Drawing account. debits for agreed monthly drawings	2,400 00	
Profit and Loss account credit balance—to be divided equally		8,000 00

The changes in the partners' capitals during the year are shown by the following statement.

A AND B
Statement of Partners' Capitals
Year Ended December 31, 1934

	A	*B*	Together
Balances, January 1, 1934	\$20,000 00	\$15,000 00	\$35,000 00
Add Additional Investments	3,000 00	2,500 00	5,500 00
Net Profits.	4,000 00	4,000 00	8,000 00
Total	\$27,000 00	\$21,500 00	\$48,500 00
Deduct Withdrawals	3,900 00	3,400 00	7,300 00
Balances, December 31, 1934....	\$23,100 00	\$18,100 00	\$41,200 00

Adjustment of profits of prior periods.—If it is necessary to adjust the profits of prior periods, the adjustment should be made in the partners' Capital accounts and not in the Profit and Loss account. There are two reasons for this. In the first place, the Profit and Loss account is intended to show only the profits for the current period. In the second place, if the profit and loss ratio has changed, the adjustment should affect the partners' capitals in the ratio which prevailed during the period in which the error was made; if the adjustment were put through the Profit and Loss account, it would affect the capitals in the ratio of the period in which the error was discovered.

CHAPTER 32

PARTNERSHIPS (Continued)

Dissolution

Dissolution of a partnership.—A partnership is based on a contract, and when the contract is terminated the partnership is dissolved. It is important to recognize the fact that the dissolution of a partnership does not necessarily mean the discontinuance of the business, it means merely that the old partnership contract, formerly existing, is no longer in force. After the contract is terminated and the partnership thus dissolved, the business may go out of existence; on the other hand, a new partnership contract may be formed and the business continued.

Causes of dissolution.—The causes of partnership dissolution are classified as follows:

(A) Act of the parties.

(1) Termination of the time agreed upon in the contract.

If, at the time of making the partnership contract, the parties agree upon the length of time the contract shall remain in force, the termination of the agreed time dissolves the partnership. The partners may continue the partnership relation, but it is thereafter a "partnership at will" and any partner may withdraw at any time.

(2) Accomplishment of the purpose for which the partnership was formed.

If the partnership contract states that the partnership was formed for a definite purpose, as for the purchase and sale of a certain invoice of merchandise, or for the construction of a building, the accomplishment of the

stated purpose discharges the contract and dissolves the partnership.

(3) Mutual agreement.

Since a partnership is based on a contract, the parties to the contract may, by mutual consent at any time, agree to terminate the contract.

(4) Withdrawal of a partner.

It has already been noted that a partner has the *right* to withdraw if (1) the agreed time has elapsed, (2) the stated purpose has been accomplished, or (3) a mutual agreement has been reached. A partner has the *power* to withdraw at any time even though he may have no right to do so. A partner's withdrawal without the right to withdraw is a violation of his contract, and renders him liable for any damages that may result from such violation. But his withdrawal nevertheless dissolves the partnership

(B) Operation of law.

(1) Death of a partner.

The death of a partner automatically dissolves the partnership. The articles of partnership may provide that the deceased partner's estate or heirs may succeed him in the partnership. But such a provision results in the creation of a new partnership, it does not prevent the dissolution of the old one.

(2) Bankruptcy.

The bankruptcy of the firm or of a partner dissolves the partnership.

(3) War.

If the partners are citizens or subjects of different countries, the partnership is dissolved by war between these countries, or at least suspended during the continuance of the war.

(4) Illegality of object.

A partnership cannot be formed for an illegal purpose, and a legally organized partnership is dissolved by the subsequent enactment

of legislation making the business of the firm illegal.

(C) Judicial decree

A partner may appeal to a court for a decree dissolving the partnership for any of the following reasons:

(1) Insanity or other incapacity of one of the partners.
(2) Dissension among the partners.
(3) Misconduct of a partner, tending to interfere with the success of the business.
(4) Inability to make profits.
(5) Fraud in the inducement that caused him to become a partner.

Purpose of dissolution.—It should be borne in mind that the dissolution of a partnership means merely the termination of the contract theretofore existing between the partners. The partnership may be dissolved for the purpose of discontinuing the business, or for the purpose of changing the personnel of the partnership or the form of organization.

With these points in mind, it seems desirable to classify the purposes of partnership dissolution and thus furnish an outline to be followed in the discussion of the accounting principles involved.

The reasons for the dissolution of a partnership are:

(1) Admission of a partner.	Discussed in this chapter.
(2) Retirement of a partner (3) Sale of the business. (4) Change to corporate organization.	Discussed in Chapter 33.
(5) Liquidation.	Discussed in Chapters 34 and 35.

Admission of a New Partner

Admission follows dissolution.—When a new partner is admitted, a new partnership is created. The creation of the new partnership automatically dissolves the old one, since the agreement which formerly bound the old partners is now superseded by a new agreement binding the new partners. Therefore new articles of partnership should be drawn up, because the old articles cannot be assumed to bind the new partner, who was not a party to the old contract.

Purchase of an interest distinguished from investment.—A new partner may gain admission to the firm in either of two ways:

(1) By purchasing all or a portion of the interest of an old partner.
(2) By making a contribution to the capital of the partnership.

Purchase of an interest.—No partner has a right to sell all or a portion of his interest in the capital of the firm without the consent of the other partners. The right to choose one's associates in a partnership is a fundamental right; if a partner attempts to sell his interest without the consent of the other partners, he dissolves the partnership, and the purchaser does not become a partner. (This is the rule under the common law, which is somewhat modified by the Uniform Partnership Act.) The purchaser obtains only the right to demand a settlement of the affairs of the firm and a payment of whatever interest may remain to him after the assets have been realized and the liabilities paid. Moreover, the partner who sells without consent is liable to his former partners for whatever loss they may sustain as a result of his action.

If the sale is made with mutual consent, a new partnership is formed. As the payment is made by the purchasing partner to the selling partner, the cash or other assets given in payment will not appear on the firm's books. The only entry required is one transferring a capital credit from the account of the old partner to the account of the new one.

To illustrate, assume that *A*, *B*, and *C* have capitals of \$10,000 00, \$15,000.00, and \$20,000.00, respectively. By mutual consent, *C* sells one half of his capital interest to *D* for the sum of \$12,000 00. The only entry required on the partnership books is:

C, Capital	10,000 00	
D, Capital		10,000 00
To record the sale of one half of *C*'s capital to *D*		

Since the sale of all or a portion of one partner's interest dissolves the old partnership, new articles should be drawn

up for the new partnership. It is particularly important that the new profit and loss sharing ratio be definitely agreed upon, because the dissolution of the old partnership cancels the old profit and loss sharing agreement.

Investment in a partnership.—A new partner may gain admission to the firm by making a contribution to the partnership capital. The assets contributed are in this instance placed on the firm's books. It is essential that the assets thus contributed be properly valued, because any subsequent loss or gain on the sale of these assets becomes a partnership loss or gain and not a loss or gain of the contributing partner.

To illustrate, assume that *A* and *B* are in partnership, with capitals of $10,000.00 each. They occupy a store building owned by *C*, and it is decided to take *C* into partnership. *C* is to contribute his store property as his investment, and profits are to be shared equally. The store property is really worth $13,000 00, but *C* unwisely allows it to be placed on the books at $10,000.00 so that his capital will be equal to that of each of the other two partners.

The fact that profits are to be shared equally does not mean that the capitals must be equal; *C* could have been credited with $13,000.00, the true value of the property, and still have taken only one third of the profits. And he should have been credited with $13,000.00, for if the property is placed on the books at $10,000.00 and is subsequently sold for $13,000.00, the three partners will share equally in the profit of $3,000.00.

Outline of cases—Investments in a partnership.—The five following cases illustrate the following conditions with respect to investments in partnerships:

(1) No goodwill allowed to old or new partners.
(2) Goodwill allowed to old partners.
(3) Goodwill allowed to new partner.
(4) Bonus allowed to old partners.
(5) Bonus allowed to new partner.

Case 1: No goodwill.—If no goodwill is to be placed on the books, the only entries necessary to record the admission of a partner are:

(1) Entries to adjust the valuation of any of the assets of the old partnership in accordance with the agreement.

(2) Entries to record the investment of the new partner.

To illustrate, assume that *A* and *B*, sharing profits equally, have capitals of \$10,000.00 and \$15,000 00, respectively. Their land is to be written up from \$1,000.00 to \$1,500 00; the reserve for bad debts is to be increased \$200.00, and *C* is to enter the firm with an investment of \$12,000.00. The entries are:

Land	500 00	
A, Capital		250 00
B, Capital		250 00
To write up the land from \$1,000 00 to \$1,500 00 in accordance with the agreement with *C*, prior to his admission.		
A, Capital	100 00	
B, Capital	100 00	
Reserve for Bad Debts		200 00
To add \$200 00 to the reserve for bad debts		
Cash .	12,000 00	
C, Capital		12,000 00
To record *C*'s investment		

The accounts of the partners now stand as follows:

A	\$10,150 00
B	15,150 00
C ..	12,000 00

There is no statement in this illustration regarding the profit sharing ratio which is to prevail in the new firm, for this ratio has no bearing on the entries to be made at the time of the admission of *C*.

Case 2· GOODWILL ALLOWED TO OLD PARTNERS.—If goodwill is to be allowed to the old partners, it should be placed on the books prior to the admission of the new partner, and the credit therefor should be divided between the old partners in their profit and loss ratio.

To illustrate, *A* and *B*, sharing profits in the ratio of two thirds and one third, respectively, have capitals of \$15,000.00 and \$20,000.00. *C* is to invest \$10,000.00 in the business, but prior to his admission a goodwill of \$3,000.00 is to be

placed on the books. The necessary entries are:

Goodwill	3,000 00	
A, Capital		2,000 00
B, Capital		1,000 00
To record the goodwill of the firm of *A* and *B*, in accordance with the agreement made prior to the admission of *C*		
Cash	10,000 00	
C, Capital		10,000 00
To record *C*'s capital investment		

The capital accounts of the three partners now stand as follows:

A	$17,000 00
B	21,000 00
C	10,000 00

Case 3: Goodwill allowed to new partner.—Sometimes the new partner is allowed a credit for goodwill because he has been conducting a successful business and is expected to bring patronage with him.

To illustrate, *A* and *B*, with capitals of $10,000.00 and $20,000.00, admit *C* to partnership *C* invests $12,000.00 of merchandise and is allowed $3,000.00 credit for goodwill. The journal entry is

Merchandise	12,000 00	
Goodwill	3,000 00	
C, Capital		15,000 00
To record the admission of *C* as a partner		

The capital accounts of the three partners now stand as follows:

A	$10,000 00
B.	20,000 00
C	15,000 00

Case 4: Bonus allowed to old partners.—Instead of placing a Goodwill account on the books, the old partners may demand a bonus. In that instance, a portion of the capital contributed by the new partner is credited to the accounts of the old partners. This credit is divided between the old partners in their profit and loss ratio, unless otherwise agreed

To illustrate, *A* and *B*, sharing profits equally and having capitals of \$15,000.00 and \$20,000.00, respectively, agree to admit *C*, on condition that he contribute \$17,000.00, of which \$2,000.00 shall be credited to their accounts. The journal entry is:

Cash	17,000 00	
A, Capital		1,000 00
B, Capital		1,000 00
C, Capital		15,000 00
To record the admission of *C* and his contribution of \$17,000 00, of which \$2,000 00 is credited as a bonus to the old partners in their profit and loss ratio		

The accounts of the partners now stand as follows:

A	\$16,000 00
B	21,000 00
C	15,000 00

Case 5: Bonus allowed to new partner.—It is sometimes necessary to allow a bonus to the new partner. Under such circumstances, the new partner is credited with his contribution, and the required bonus is transferred from the accounts of the old partners to the account of the new partner. Unless some other agreement is made, the bonus is charged to the old partners in their profit and loss ratio.

To illustrate, *A* and *B*, having capitals of \$15,000.00 and \$10,000.00 and sharing profits equally, admit *C* to partnership. *C* is to contribute \$13,000.00 and receive a total capital credit of \$15,000.00. The credit of \$2,000.00 in addition to *C*'s cash contribution is to be obtained by transfer from the accounts of the old partners. The entries are:

Cash	13,000 00	
C, Capital		13,000 00
To record the cash contribution made by *C*.		
A, Capital	1,000 00	
B, Capital.	1,000 00	
C, Capital		2,000 00
To record the bonus transferred from *A* and *B* to *C*.		

Implied goodwill or bonus.—Examinations for the C. P. A certificate have often contained problems of the five types

just illustrated, dealing with the admission of a partner. In some of these C. P. A. problems, there is no express statement as to whether the old or new partners are to be allowed a goodwill or a bonus, but sufficient information is given to enable the candidate to determine by analysis whether a goodwill or a bonus is implied. Problems of this nature may be divided into two groups, depending on the information given.

First type of problems.—In problems of this type the following information is given:

Capitals of old partners.
Incoming partner's contribution.
Total agreed capital of the new firm.
Fractional interest in total capital allowed the incoming partner.

Five illustrations are given, covering the five typical cases.

Case 1: NO GOODWILL OR BONUS.—*A* and *B* have capitals of \$10,000.00 and \$20,000.00, respectively. *C* is to contribute \$10,000 00. The total capital of the new firm is to be \$40,000.00, and *C* is to have a one-fourth interest therein.

The three capitals, as stated, add to \$40,000.00, the agreed total capital; therefore there is no goodwill. *C*'s capital is equal to his contribution; therefore no bonuses are to be allowed.

Cash . .	10,000 00	
C, Capital		10,000 00
To record *C*'s contribution		

Case 2: GOODWILL TO OLD PARTNERS.—*A* and *B* have capitals of \$10,000 00 and \$20,000.00, respectively. They share profits equally. *C* is to contribute \$11,000.00 for a one-fourth interest in the agreed total capital of \$44,000.00.

The capitals of *A* and *B*, plus the contribution of *C*, amount to \$41,000.00. But since the total capital is to be \$44,000.00, it is necessary to put a Goodwill account of \$3,000.00 on the books. As *C*'s credit of \$11,000 00 is equal to the amount of cash paid in, he is to receive no credit for goodwill; hence the goodwill is to be credited to the old partners.

Goodwill	3,000 00	
A, Capital		1,500 00
B, Capital		1,500 00
To place the goodwill on the books		
Cash	11,000 00	
C, Capital		11,000 00
To record *C*'s contribution		

Case 3. GOODWILL TO NEW PARTNER.—*A* and *B* have capitals of $10,000.00 and $20,000 00, respectively. *C* is admitted to partnership, paying in $8,000.00. The total capital is to be $40,000.00, and *C* is to have one fourth thereof.

The capitals of *A* and *B* plus *C*'s cash contribution amount to $38,000.00. But since the total capital is to be $40,000.00, a Goodwill account of $2,000.00 must be put on the books. This goodwill must be credited to *C* to make his total capital $10,000.00, or one fourth of $40,000.00.

Cash	8,000 00	
Goodwill	2,000 00	
C, Capital		10,000 00
To record *C*'s admission to the partnership		

Case 4: BONUS TO OLD PARTNERS.—*A* and *B* have capitals of $10,000.00 and $20,000.00, respectively. They share profits equally. *C* is to contribute $14,000.00 for a one-fourth interest in the total capital of $44,000.00.

The capitals of *A* and *B* plus *C*'s contribution amount to $44,000.00, the agreed total capital. Hence it is unnecessary to put a Goodwill account on the books. But *C* pays in $14,000.00 and receives credit for only one fourth of $44,000.00, or $11,000.00. Hence $3,000.00 of his contribution must be credited to the old partners as a bonus.

Cash	14,000 00	
A, Capital		1,500 00
B, Capital		1,500 00
C, Capital		11,000 00
To record *C*'s admission to the partnership		

Case 5. BONUS TO NEW PARTNER.—*A* and *B* have capitals of $10,000.00 and $20,000 00, respectively. They share profits equally. *C* is to pay in $8,000.00 for a one-fourth interest in a total capital of $38,000.00.

The capitals of *A* and *B* plus *C*'s contribution amount

to \$38,000.00. Hence there is to be no Goodwill account. But C is to pay in \$8,000.00 and receive credit for one fourth of \$38,000.00, or \$9,500.00. Hence a bonus of \$1,500.00 must be transferred to him.

Cash	8,000 00	
C, Capital		8,000 00
To record C's cash contribution		
A, Capital	750 00	
B, Capital	750 00	
C, Capital		1,500 00
To record the transfer of a bonus from A and B to C		

Second type of problems.—In problems of this type the following information is given:

Capitals of old partners.
Incoming partner's contribution.
Capital credit allowed new partner, and fraction of total represented thereby.

This type of problems does not differ essentially from problems of the first type. The only difference is that the total agreed capital is not stated; but the information concerning the capital credit allowed the new partner and the fraction of the total represented thereby, is sufficient to make possible the computation of the total capital.

Case 1: NO GOODWILL OR BONUS.—A's capital is \$10,000.00; B's capital, \$20,000.00, C pays in \$10,000.00 for a one-fourth interest in the capital and is credited therewith.

The total capital is to be four times \$10,000 00, or \$40,000 00. The capitals add to \$40,000.00, and C's contribution is one fourth thereof, hence there is no goodwill or bonus.

Case 2: GOODWILL TO OLD PARTNERS.—A's capital is \$10,000.00; B's capital, \$20,000 00. Profits are shared equally. C contributes and is credited with \$11,000.00, representing a one-fourth interest in the capital.

As C's capital of \$11,000.00 is one fourth of the total, the entire capital must be \$44,000.00. The capitals of A and B plus C's contribution amount to only \$41,000.00. Hence there must be a goodwill of \$3,000.00, to be allowed to the old partners.

Case 3: GOODWILL TO NEW PARTNER.—A's capital is \$10,000.00, B's capital, \$20,000.00. C pays in \$8,000 00 and

is to have a capital credit of $10,000 00, or one fourth of the total capital.

The total capital is to be four times $10,000.00, or $40,-000 00. The present capitals and C's contribution add to $38,000.00. Hence there must be a goodwill of $2,000 00, which must be allowed to C to make up the difference between his $8,000.00 contribution and the capital credit of $10,000.00 allowed him.

Case 4. Bonus to old partners.—A's capital is $10,-000.00; B's capital, $20,000.00. Profits are shared equally. C pays in $14,000 00 and is credited with $11,000.00, as one fourth of the total capital.

The total capital is to be four times $11,000.00, or $44,-000.00. The present capitals and C's contribution add to $44,000.00, hence there is no goodwill. As C pays in $14,-000.00 and is credited with only $11,000.00, the other partners must be credited with $3,000.00 as a bonus.

Case 5. Bonus to new partner.—A's capital is $10,-000.00; B's capital, $20,000.00. Profits are shared equally. C contributes $8,000.00 and is to be credited with $9,500.00, as a one-fourth interest in the capital.

The total capital is four times $9,500.00, or $38,000.00. The present capitals and C's contribution add to this sum, hence there is no goodwill. But C pays in $8,000.00 and is credited with $9,500.00. The additional $1,500.00 must be transferred from the old partners' capitals to the new partner's capital as a bonus.

Vague problems.—Some problems dealing with the admission of a partner do not contain enough information to permit of a positive solution. To make journal entries for the admission of a partner, the following information must be stated by the problem or be obtainable by analysis:

Original capitals of old partners.
Contribution of the new partner.
Total capital of the new firm.
Capital credit of the new partner.

The following is cited as an illustration of a vague problem, impossible of a positive solution:

A and *B*, with capitals of $10,000.00 and $20,000.00, respectively, and sharing profits equally, admit *C* to a one-fourth interest in the capital by the payment of $12,000.00.

This problem does not state either the total capital of the new firm or the credit to be given to the new partner. It may therefore be solved in either of two ways.

First, it may be assumed that *C* is to be credited with $12,000.00. On this assumption, the total capital will be four times $12,000.00, or $48,000.00. Since the capitals of *A* and *B*, plus *C*'s contribution, amount to $42,000.00, it becomes necessary to put a $6,000.00 Goodwill account on the books. The entries, on this assumption, are:

Goodwill	6,000 00	
A, Capital		3,000 00
B, Capital		3,000 00
Cash	12,000 00	
C, Capital		12,000 00

The capitals are:

A	$13,000 00
B	23,000 00
C	12,000 00

Second, it may be assumed that the capital is to be the sum of *A*'s and *B*'s capitals plus *C*'s contribution, or $42,000.00. *C* is to have one fourth of this capital, or $10,500.00. But since *C* pays in $12,000.00, there is a bonus of $1,500.00 to be divided between *A* and *B*. The entries, on this assumption, are:

Cash	12,000 00	
A, Capital		750 00
B, Capital		750 00
C, Capital		10,500 00

The capitals are:

A	$10,750 00
B	20,750 00
C	10,500 00

CHAPTER 33

PARTNERSHIPS (Continued)

Retirement of a Partner

Adjustment of asset values.—When a partner retires, he has a right to be paid the amount of his equity in the business. But the question arises whether his equity is fairly measured by the balance of his Capital account. Three classes of adjustments in the asset values may be necessary to produce a balance in the retiring partner's Capital account which is a fair amount for him to demand and receive.

In the first place, improper provision for bad debts, depreciation, and other shrinkages in asset values may have been made during the years of operation. The provisions may have been insufficient or excessive, and this fact becomes significant when one partner is to withdraw. If the provisions have been insufficient, a hardship will be worked on the remaining partners unless an adjustment is made; if the provisions have been excessive, an adjustment should be made to avoid working a hardship on the retiring partner.

In the second place, the rules which properly govern the valuation of assets in a going concern may not be the proper rules to apply in valuing the assets of a partnership which is about to dissolve. For instance, in figuring the profits of a going concern, it is a conservative practice to value the inventory at cost or market, whichever is lower; but when a partner is about to retire, he is virtually selling his interest in the inventory to the remaining partners, and justice would seem to require that he receive the benefit of any increase in the market value of the merchandise which took place before his retirement.

Fixed assets provide another illustration. From the standpoint of a going concern, fluctuations in the market value of fixed assets need not be recorded in the accounts. An increase in value is an unrealized profit, and a decrease

in value need not be put on the books if there is no intention to sell the assets and to take the loss. But when a partner is retiring, the partnership of which he is a member is selling the assets to the remaining partner or partners, and equity requires that the transfer be made at market values prevailing at the date of sale.

In the third place, the partners may agree to place a Goodwill account on the books. This subject is treated in the next section.

If any adjustments are made in the asset values, the gain should be credited, or the loss debited, to the partners in the profit and loss ratio.

Goodwill.—The partnership articles may provide that a Goodwill account shall be placed on the books in the event of the retirement of a partner. In such instances, the articles usually stipulate how the goodwill shall be computed. Or, at the time of the retirement, the partners may agree to place such an account on the books, and upon the method of computing it.

The general rule is that the credit for goodwill thus placed on the books should be divided among the partners in the profit and loss ratio existing at the time the entry is made, and this rule governs unless the partners agree to some other division.

It is sometimes contended that when the profit and loss ratio has changed during the existence of the partnership, the credit for goodwill should be divided on the basis of an average of these past ratios. There does not seem to be sufficient argument to support this view. Goodwill exists when there is reason to believe that future profits will provide more than an average return on the investment. Past profits may serve as an evidence of this probability, but the value placed on the goodwill is the purchase price of future, not past, profits. If the retiring partner had chosen to remain in the partnership, he would have shared in these future profits in the present profit and loss ratio, not in the average ratio of the past. At least, the present ratio would continue unless he consented to a change. The retiring partner takes an allowance for goodwill at the date of retirement, instead of continuing as a member of the firm and taking his share of

future profits. It seems logical, therefore, that he should be credited with a share of the goodwill based on the profit and loss ratio at the date of his retirement, since that ratio would presumably have governed the distribution of future profits had he chosen to remain.

After the amount of the goodwill and its division in the profit and loss ratio, are determined, the question remains concerning the method of recording it. Two conflicting views are held regarding the proper method of putting the goodwill on the books. These methods will be illustrated by an assumed case in which C is to retire from the firm of A, B, and C, who share profits equally. A goodwill value of $6,000.00 has been agreed upon.

First method.—Place the entire goodwill on the books, crediting all of the partners in their profit and loss ratio, by the following journal entry:

Goodwill	6,000 00	
A, Capital		2,000 00
B, Capital		2,000 00
C, Capital		2,000 00
To place on the books the agreed value of the goodwill, crediting the partners therefor in their profit and loss ratio		

Second method.—Place on the books only the share of goodwill to be credited to the retiring partner, by the following journal entry:

Goodwill	2,000 00	
C, Capital		2,000 00
To place on the books *C*'s one third of the goodwill, which has been valued by agreement at $6,000 00		

The second method is the more conservative, because it conforms to the accounting principle that goodwill should be placed on the books only when it has been paid for. If A and B are to continue the business, their books will not conform to this principle if a Goodwill account of $6,000 00 is shown. Only $2,000.00 was paid for goodwill on the retirement of C.

Liability of retiring partner.—After retirement, a partner is liable for firm debts incurred while he was a partner, unless the creditors release him. Furthermore, unless he was a

secret partner, he is liable to former creditors for debts incurred after his retirement if such creditors have no notice of his retirement and extend credit on the assumption that he is still a partner. Therefore it is advisable for a retiring partner to give notice, either orally or in writing, to all parties with whom the firm has had dealings.

Settlement with retiring partner.—The cash or other assets given to the withdrawing partner should be charged to his account. If he is paid in full, the account will, of course, be closed. In some instances, however, full payment is deferred, either because of the inadequacy of funds, or because an agreement cannot be reached regarding the value of certain assets, such as accounts receivable, and it is decided to postpone payment until the assets have been converted into cash and the losses ascertained

When settlement is thus postponed, the Capital account of the retiring partner should be closed, because he is no longer a partner; and the balance of the Capital account should be transferred to a personal account or a Note Payable account, as the case may be. This account should be given a title which will clearly distinguish it from the trade accounts and notes payable

If the settlement is postponed, pending the realization of doubtful assets, such as accounts receivable, the accounts with these assets should be kept entirely distinct from the accounts with similar assets obtained after the partner's retirement. Otherwise there may be difficulty in determining whether or not a loss should be charged in part to the former partner.

Death of a partner.—The death of a partner automatically dissolves the partnership, and it becomes the duty of the surviving partners to wind up the affairs of the partnership and to make a settlement with the deceased partner's estate.

If the articles of partnership contain no provisions with respect to the death of a partner, the surviving partners should realize that the partnership has been dissolved and that the estate of the deceased partner is entitled to receive the amount of his interest in the firm at the date of his death. Therefore, the surviving partners should immediately take an inventory and close the books, to determine the capital interest of the deceased partner, including his share of the

profits to the date of his death. As the decedent is no longer a partner, the balance of his Capital account should be transferred to a personal account, pending settlement with the estate.

The articles of partnership may, however, contain provisions intended to avoid the necessity of taking an inventory and closing the books at the date of death. If the determination of the actual profits to the date of death and the determination of current values of assets as of that date are not required for estate or inheritance tax purposes, the following procedures may be effective.

(A) There may be an agreement that the estate or an heir of the decedent shall succeed him as a partner.

When such an agreement has been made, it is not necessary to close the books and to ascertain the profits to the date of death. It is necessary only to close the deceased partner's Drawing account, and to transfer his capital credit to a Capital account with the estate or the heir. At the next regular closing, the share of profits credited to the estate or the heir will include the profits earned to the date of death, as well as those earned subsequently. The questions of goodwill and the realizable value of assets at the date of the partner's decease may be ignored, because the estate or heir merely steps into the decedent's place as a partner of a going business.

(B) If the deceased partner's interest is to be paid to his estate, the articles may contain an agreement that the profits to the date of death shall be estimated in some manner, instead of being actually computed by taking an inventory and closing the books. The methods of making the estimate may be divided into two general classes, as follows:

(1) The profits to the date of death may be estimated on the basis of an average of the profits of a number of years preceding the year of death. For instance, *A*, *B*, and *C*, sharing profits equally, agreed that, in the event of the death of a partner, the deceased partner's share of profits from the date of the last

closing until the date of death should be estimated by averaging the profits of the past four years and multiplying this average by the fraction of the year between the date of the last closing and the date of death. *A* died on March 31, 1933, and his share of the profits earned since the preceding December 31 was estimated as follows:

Year	Profits
1929	$18,500 00
1930	17,625 00
1931	18,346 00
1932	18,297 00
Total	$72,768 00
Average	$18,192 00
Fraction of year since last closing	¼
Estimated profits for three months	$ 4,548 00
A's fractional interest	⅓
A's estimated share of profits	$ 1,516 00

These estimated profits should be credited to *A* by a journal entry similar to the following:

A's Estimated Profits	1,516 00	
A, Capital		1,516 00
To credit *A* with his share of the estimated profit for the three months ended March 31, 1933		

The account called *A*'s Estimated Profits should remain open until the closing of the books on December 31, 1933, when it should be closed to Profit and Loss as a division of the profits.

(2) The articles may provide that settlement with the deceased partner's estate shall be postponed until the next regular closing, at which time his account shall be credited with a share of the profits.

Various methods may be agreed upon for computing the deceased partner's portion of the profit. Since the partnership retained his capital during the full period, he may receive a share of the profits for the full period.

Or his account may be credited with a share of the profits for the full period minus an allowance for the loss of his services. Or the credit may be for the proper fraction of the period's profits, plus interest on his capital and on his share of the profits from the date of death to the date of settlement.

When settlement is thus postponed, the balance of the deceased partner's Capital account should be transferred to a personal account or to an account with the estate.

The articles of partnership may also contain an agreement as to goodwill, and as to the recognition of the market value of other assets as of the date of the death of a partner.

Sale of a Partnership Business

Valued assets or lump sum.—When a business is sold, the seller and purchaser may agree upon the valuation of each asset, or they may agree on a lump-sum price for the business as a whole. The method of recording the sale will depend upon which of these methods is adopted.

Several illustrations will be given, assuming the sale of a business with the following balance sheet:

A*, *B*, AND *C
Balance Sheet—April 30, 1933

Assets		
Land		$ 1,000.00
Buildings	$6,000 00	
Less Reserve for Depreciation	800 00	5,200 00
Merchandise		4,800 00
Accounts Receivable	$4,560 00	
Less Reserve for Bad Debts	140 00	4,420 00
Cash		280 00
		$15,700 00
Liabilities		
Accounts Payable		$ 1,000 00
Notes Payable		500 00
A, Capital		6,100 00
B, Capital		5,100 00
C, Capital		3,000 00
		$15,700 00

Profits and losses are shared equally.

Valued assets.—It is first assumed that the assets are sold to J. G. Burroughs at the following agreed values:

Land	$1,500 00
Buildings	5,000 00
Merchandise	4,500 00
Accounts Receivable	4,000 00

The cash is not sold, and the liabilities are not assumed by the purchaser.

The procedure for recording the sale may be summarized as follows:

Adjust the asset values, closing out the various reserves, and taking up the net gain or loss to the partners' capitals in the profit and loss ratio. The gain or loss may be entered directly in the Capital accounts or carried through a Capital Adjustment account.

Close out the asset accounts, charging a Vendee account.

Record the collection from the vendee.

Record the payment of the liabilities.

Record the final distribution of assets among the partners.

The journal entries to record the sale, in accordance with the terms stated in the illustration, the payment of the liabilities, and the distribution to the partners, are as follows.

(1) Land	500 00	
Capital Adjustment Account		500 00
To write up the land to the agreed value of $1,500 00		
(2) Reserve for Depreciation—Buildings	800 00	
Capital Adjustment Account	200 00	
Buildings		1,000 00
To write down the buildings to the agreed value of $5,000 00, closing the reserve and recording the loss of $200 00		
(3) Capital Adjustment Account	300 00	
Merchandise		300 00
To write down the merchandise from $4,800 00 to the agreed value of $4,500 00		
(4) Reserve for Bad Debts	140 00	
Capital Adjustment Account	420 00	
Accounts Receivable		560 00
To write down the accounts receivable from $4,560 00 to $4,000 00, closing the reserve and taking up the loss of $140 00		

(5) *A*, Capital .	140 00	
B, Capital	140 00	
C, Capital	140 00	
Capital Adjustment Account		420 00
To divide the loss on the sale in the profit and loss ratio.		
(6) J. G. Burroughs, Vendee .	15,000 00	
Land . .		1,500 00
Buildings		5,000 00
Merchandise		4,500 00
Accounts Receivable		4,000 00
To record the sale of the assets at the agreed values.		
(7) Cash	15,000 00	
J. G Burroughs, Vendee		15,000 00
To record the collection from Burroughs .		
(8) Accounts Payable	1,000 00	
Notes Payable .	500 00	
Cash		1,500 00
To record the payment of the liabilities		
(9) *A*, Capital .	5,960 00	
B, Capital	4,960 00	
C, Capital	2,860 00	
Cash		13,780 00
To record the final distribution of cash		

	A	*B*	*C*
Capitals . . .	6,100 00	5,100 00	3,000 00
Less loss on sale.	140 00	140 00	140 00
Cash .	5,960 00	4,960 00	2,860 00

Lump-sum sale: At a loss.—When the assets are sold for a lump sum, it is impossible to adjust the asset values. If the price is less than the book value of the assets transferred, the loss should be taken up in the entry for the sale.

To illustrate, assume that the assets of *A*, *B*, and *C*, exclusive of the cash, are sold for a lump sum of $15,000.00, without placing values on the individual assets. The entries for the transfer of the assets will be:

(1) J. G Burroughs, Vendee .	15,000 00	
Reserve for Depreciation—Buildings	800 00	
Reserve for Bad Debts . .	140 00	
Capital Adjustment Account	420 00	
Land		1,000 00
Buildings		6,000 00
Merchandise . . .		4,800 00
Accounts Receivable		4,560 00
To record the sale of the assets, exclusive of cash, for $15,000 00.		

(2) *A*, Capital	140 00	
B, Capital	140 00	
C, Capital	140 00	
Capital Adjustment Account		420 00
To divide the loss on the sale.		

These entries will be followed by entries 7, 8, and 9, as in the preceding illustration.

Lump-sum sale: At a profit.—The entries to be made when a business is sold at a profit will depend upon whether the profit is regarded as a payment for goodwill or as an adjustment of the value of other assets.

Illustration: PROFIT REGARDED AS A PAYMENT FOR GOODWILL.—Assume that the assets of the firm of *A*, *B*, and *C* are sold to J. G. Burroughs at a lump-sum price of $18,000.00, the entries will be.

(1) Goodwill	2,580 00	
Capital Adjustment Account		2,580 00
To take up, by charge to Goodwill, the excess of the sale price of the assets over their book value		
(2) J G Burroughs, Vendee	18,000 00	
Reserve for Depreciation—Buildings.	800 00	
Reserve for Bad Debts	140 00	
Land		1,000 00
Buildings		6,000 00
Merchandise		4,800 00
Accounts Receivable		4,560 00
Goodwill		2,580 00
To record the sale of the assets for $18,000 00		
(3) Capital Adjustment Account	2,580 00	
A, Capital		860 00
B, Capital		860 00
C, Capital		860 00
To divide the profit on the sale of the business		
(4) Cash	18,000 00	
J. G. Burroughs, Vendee		18,000 00
To record the collection from Burroughs		
(5) Accounts Payable	1,000 00	
Notes Payable	500 00	
Cash		1,500 00
To record the payment of the liabilities		
(6) *A*, Capital	6,960 00	
B, Capital	5,960 00	
C, Capital	3,860 00	
Cash.		16,780 00
To record the final distribution of cash to the partners		

Illustration: PROFIT REGARDED AS AN ADJUSTMENT OF ASSET VALUES.—The fact that the assets were sold for more than their book value is not conclusive evidence of the existence of a goodwill. The excess price may have been due to the fact that the book values of the assets were understated. On this assumption, the entries for the sale of the assets for $18,000.00 will be as follows:

(1) J G Burroughs, Vendee	18,000 00	
Reserve for Depreciation—Buildings	800 00	
Reserve for Bad Debts	140 00	
Land		1,000 00
Buildings		6,000 00
Merchandise		4,800 00
Accounts Receivable		4,560 00
Capital Adjustment Account		2,580 00
To record the sale of the assets, exclusive of cash, for $18,000 00.		

This entry will be followed by entries 3, 4, 5, and 6, as in the immediately preceding illustration.

Transfer of liabilities.—If the purchaser assumes the liabilities, the entry transferring the assets will be followed by an entry transferring the liabilities, as follows:

Accounts Payable	1,000 00	
Notes Payable	500 00	
J G Burroughs, Vendee		1,500 00
To record the assumption of our liabilities by the purchaser of the assets		

When the liabilities are assumed by the purchaser of a business, the seller is not relieved from liability unless the creditors release him.

Division of profit or loss on sale.—It cannot be too strongly emphasized that the agreed profit and loss ratio governs the division of gains or losses arising from the sale of a partnership's assets. Any agreement which the partners have made in regard to profits applies with equal force to losses, and the agreement concerning the sharing of profits or losses during operations applies also to profits or losses during liquidation, when the partnership is selling its assets and going out of business.

It is an error to assume that losses incurred at the dissolution of a partnership should be divided in the capital ratio.

One writer has stated that such losses should be divided in the capital ratio and has supported this statement by the argument that when the partners decide to go out of business the partnership is dissolved, the partnership agreement is no longer binding, and, thereafter, losses are losses of capital and should be borne in the capital ratio

There are several answers to this argument. In the first place, all losses are losses of capital. If operations result in a loss, the capital of the partners is reduced, but the loss is borne in the profit and loss ratio.

In the second place, the partnership is not dissolved merely by the decision to sell the business or to discontinue operations. The partners have placed their assets in a common fund for common operations, and they continue to be partners until the business is sold or the assets are realized. Any losses on sale or realization are therefore partnership losses, and the agreement concerning the division of partnership losses governs their division.

In the third place, the profits or losses from operations which have been divided in the agreed ratio are merely periodical estimates; the true profit or loss on the partnership venture is not definitely determinable until the partnership is dissolved and the partnership fund is distributed among the partners. The depreciation, which affected the statement of operating profits, may have been incorrect, the provision for bad debts may have been incorrect; other assets may have been incorrectly valued. All of these things have affected the profits which have been divided in the profit and loss ratio; the loss or gain disclosed at dissolution is in a sense a correction of all of these errors, and it also should be divided in the profit and loss ratio.

In the fourth place, the agreement with respect to sharing of profits and losses is an unqualified agreement. Since the agreement is not expressly limited to operating profits or losses, it is incorrect to imply any such limitation.

Incorporation of a Partnership

Classification of cases.—The accounting procedure to be followed when a partnership is changed to a corporation, will depend upon whether the partnership's books are to be used by the corporation, and whether it is desired to show the

division of stock among the partners. The typical cases may therefore be classified as follows:

(A) Partnership books retained for use by the corporation.
(B) New books to be used by the corporation
  (1) Stock distribution not shown on partnership books
    (a) Agreed values of assets shown on partnership books
    (b) Agreed values of assets not shown on partnership books
  (2) Stock distribution shown on partnership books.

Journal entries illustrating these typical cases are given on the following pages.

Basis of illustration.—It will be assumed that *A* and *B* are in partnership, sharing profits and losses equally. They decide to incorporate, and with this object in view they close their books and draw off the following balance sheet:

A **AND** *B*

Balance Sheet—December 31, 1933

Assets		
Land		$ 2,000 00
Buildings	$7,500 00	
Less Reserve for Depreciation	1,500 00	6,000 00
Merchandise		5,900 00
Accounts Receivable	$2,100 00	
Less Reserve for Bad Debts	200 00	1,900 00
Cash		200 00
		$16,000 00
Liabilities		
Accounts Payable		$ 1,000 00
Notes Payable		600 00
A, Capital		6,000 00
B, Capital		8,400 00
		$16,000 00

The assets are to be taken over by the corporation at the following values:

Land	$2,500 00
Buildings	6,500 00
Merchandise	5,900 00
Accounts Receivable	1,800 00
Cash	200 00
Goodwill	1,700 00

Partnership books retained.—If the partnership books are to be retained for use by the corporation, it is not necessary to close the partnership books. The only necessary entries are:

Entries to adjust the asset values.
Entries to close the partners' capitals and open a Capital Stock account.

These entries are given below:

(1) Land	500 00	
Capital Adjustment Account		500 00
To write up the land to $2,500 00.		
(2) Reserve for Depreciation	500 00	
Capital Adjustment Account		500 00
To reduce the depreciation reserve $500 00 in order to increase the carrying value of the building from $6,000 00 to the agreed amount of $6,500 00.		
(3) Capital Adjustment Account	100 00	
Reserve for Bad Debts		100 00
To reduce the carrying value of accounts receivable from $1,900 00 to $1,800 00		
(4) Goodwill	1,700 00	
Capital Adjustment Account		1,700 00
To place the agreed goodwill on the books		
(5) Capital Adjustment Account	2,600 00	
A, Capital		1,300 00
B, Capital		1,300 00
To divide the net increase in the asset values		
(6) *A*, Capital	7,300 00	
B, Capital	9,700 00	
Capital Stock		17,000 00
To close the partners' Capital accounts and open the Capital Stock account		

New corporation books: Stock distribution not shown.—If new books are to be opened by the corporation, the partnership books will be closed. The procedure of closing the partnership books will depend upon whether or not it is desired to show on the partnership books the adjusted values

at which the assets are transferred to the corporation. Both procedures are illustrated below.

Illustration. ADJUSTED ASSET VALUES NOT SHOWN ON PARTNERSHIP BOOKS.—The only entry necessary is one closing all of the accounts, as follows:

Accounts Payable	1,000 00	
Notes Payable	600 00	
Reserve for Depreciation—Buildings	1,500 00	
Reserve for Bad Debts	200 00	
A, Capital	6,000 00	
B, Capital	8,400 00	
Land		2,000 00
Buildings		7,500 00
Merchandise		5,900 00
Accounts Receivable		2,100 00
Cash		200 00
To close all of the accounts on the partnership books		

Illustration: ADJUSTED ASSET VALUES SHOWN ON PARTNERSHIP BOOKS.—Entries 1 to 5, inclusive, in the illustration in the section on "Partnership books retained" should be made on the partnership books. The closing of the books can then be completed by the following entry:

A, Capital	7,300 00	
B, Capital	9,700 00	
Accounts Payable	1,000 00	
Notes Payable	600 00	
Reserve for Depreciation	1,000 00	
Reserve for Bad Debts	300 00	
Goodwill		1,700 00
Land		2,500 00
Buildings		7,500 00
Merchandise		5,900 00
Accounts Receivable		2,100 00
Cash		200 00
To close all accounts on the partnership books.		

New corporation books: Stock distribution shown.—If the partnership books are to show the stock received from the corporation and the distribution of this stock to the partners, it is necessary to make entries adjusting the asset accounts to the agreed values. After the asset and Capital accounts are adjusted, it is customary to record the transfer of the assets and the liabilities by entries similar to those already described for the sale of a business. These entries may be

summarized as follows:

Adjustment of asset values and capitals.
Transfer of assets, charging the corporation in a Vendee account.
Transfer of liabilities, crediting the corporation Vendee account.
Receipt of stock from the corporation.
Distribution of stock to the partners.

Returning to the illustration, the first five entries in the illustration in the section on "Partnership books retained" would be repeated here, to adjust the asset and Capital accounts. The remaining entries would be:

The *A* and *B* Company, Vendee	18,600 00	
Reserve for Depreciation—Buildings	1,000 00	
Reserve for Bad Debts	300 00	
Goodwill		1,700 00
Land		2,500 00
Buildings		7,500 00
Merchandise		5,900 00
Accounts Receivable		2,100 00
Cash		200 00
To record the transfer of the partnership's assets to The *A* and *B* Company, at the agreed values, and in accordance with the contract of sale, dated December 31, 1933		
Accounts Payable	1,000 00	
Notes Payable	600 00	
The *A* and *B* Company, Vendee		1,600 00
To record the assumption of our liabilities by the corporation		
Stock of The *A* and *B* Company	17,000 00	
The *A* and *B* Company, Vendee		17,000 00
To record the receipt of stock of the corporation in payment for the net assets transferred, as follows:		
Assets 18,600 00		
Less liabilities 1,600 00		
Stock received for net assets 17,000 00		
A, Capital	7,300 00	
B, Capital	9,700 00	
Stock of The *A* and *B* Company		17,000 00
To record the distribution of stock between the partners		

Entries on the corporation's books.—The corporation's books should be opened by entries for:

> Subscriptions.
> Purchase of the assets.
> Assumption of the liabilities.
> Offset of partners' liability to corporation (for subscriptions) against corporation's liability to partners (for net assets).

The entries to appear on the corporation's books are

Subscriptions		17,000 00	
Capital Stock			17,000 00
To record the subscription to our entire authorized capital stock as follows			
A	7,300 00		
B	9,700 00		
Total	17,000 00		
Goodwill		1,700 00	
Land		2,500 00	
Buildings		7,500 00	
Merchandise		5,900 00	
Accounts Receivable		2,100 00	
Cash		200 00	
Reserve for Depreciation—Buildings			1,000 00
Reserve for Bad Debts			300 00
A and *B*, Vendors			18,600 00
To record the purchase of the assets of the firm of *A* and *B*, in accordance with the contract dated December 31, 1933 See minutes of directors' meeting, page 3 Payment to be made as follows			
Assets acquired	18,600 00		
Liabilities assumed	1,600 00		
Payment in stock for net assets	17,000 00		
A and *B*, Vendors		1,600 00	
Accounts Payable			1,000 00
Notes Payable			600 00
To record the assumption of the liabilities of the partnership, in accordance with the terms stated in the preceding entry.			
A and *B*, Vendors		17,000 00	
Subscriptions			17,000 00
To offset our liability to the partnership for net assets transferred to us, against the liability of the partners to the corporation for subscriptions.			

CHAPTER 34

PARTNERSHIPS (Continued)

Liquidation

Liquidation.—In its narrower sense, liquidation means the payment of a liability. But in its broader sense, liquidation means the process of winding up a business, converting the assets into cash, paying the liabilities, and distributing the remaining cash among the partners or stockholders. While this process is going on, a business is said to be in liquidation.

Realization.—Realization is the process of converting assets into cash. It is an incorrect use of accounting terminology to speak of liquidating assets. Assets are realized; liabilities are liquidated

Recording liquidation.—The process of liquidating a partnership requires entries to record the following facts:

Realization of the assets.
Division of the loss or gain on realization, by charges or credits to the partners' capitals.
Payment of the liabilities.
Payment of the partners' interests.

Order of distribution of cash.—As a general rule the cash should be distributed in the following order:

To outside creditors.
To partners for any loan accounts.
To partners for capital accounts.

This rule has some exceptions, which will be discussed in subsequent sections.

Distribution of loss or gain.—There is one invariable rule which should be followed in partnership liquidations. *Any known loss or gain on realization should be recorded in*

the partners' accounts before any payments are made to the partners. Put in another way, the rule may be stated as follows: *Always distribute the loss or gain before distributing the cash.*

This rule cannot be too strongly emphasized, for it is frequently ignored and serious errors are thereby caused. The amount to which a partner is entitled when the business is liquidated, depends upon

His capital contribution.
His loans to the firm.
His drawings.
His share of the profit or loss.

Unless all of these factors are taken into consideration, it is impossible to tell what a partner's equity is and what amount should be paid to him.

Typical cases.—The illustrations in this chapter and in Chapter 35, while not embracing all possible cases of partnership liquidation, are fairly inclusive and show the principles involved in typical problems of partnership liquidation.

In every case in this chapter, it is assumed that no payments are made to the partners until all of the assets have been realized and the loss on realization has thus been fully determined. The cases in Chapter 35 are based on the assumption that payments are made to the partners before the assets have been fully realized and the loss ascertained.

Case 1.—This case illustrates the following conditions:

Realization of assets completed before payments are made to partners.
Losses not sufficient to exhaust any partner's capital.
No loans from partners.

The following is a condensed trial balance of a partnership before realization and liquidation:

D, Capital		$20,000 00
E, Capital		10,000 00
Assets	$35,000 00	
Liabilities		5,000 00
	$35,000 00	$35,000 00

Profits and losses are shared equally. The assets are sold for $29,000.00 cash Following are the journal entries recording the realization and liquidation.

Cash	29,000 00	
D, Capital	3,000 00	
E, Capital	3,000 00	
Assets		35,000 00
To record the sale of the assets and the distribution of the loss of $6,000 00		
Liabilities	5,000.00	
Cash		5,000 00
To record the payment of the liabilities		
D, Capital	17,000.00	
E, Capital	7,000 00	
Cash		24,000 00
To record the final distribution to the partners in settlement of their capitals, as follows.		

	D	*E*
Capitals before sale	20,000 00	10,000 00
Loss on realization	3,000 00	3,000 00
Cash	17,000 00	7,000 00

The facts with regard to this liquidation may be set up in statement form in the following manner.

Statement of Liquidation

	Assets	*D*, Capital	*E*, Capital	Liabilities
Balances before realization	$35,000	$20,000	$10,000	$5,000
Loss on realization	6,000	3,000	3,000	
Cash for division	$29,000			
Capital balances after realization		$17,000	$7,000	
Payment of creditors	5,000			5,000
Payment to partners	$24,000	17,000	7,000	

It is usually sufficient to submit a statement of the partners' Capital accounts, for it is assumed that the liabilities are paid in full. Such a statement of the Capital accounts would appear as follows:

D* AND *E

Statement of Capital Accounts

	D	*E*	Together
Capitals before realization	$20,000 00	$10,000 00	$30,000 00
Deduct loss on realization	3,000 00	3,000 00	6,000 00
Balances paid in cash	$17,000 00	$ 7,000 00	$24,000 00

Wrong methods.—The necessity of charging off the loss on realization before dividing the cash between the partners has already been emphasized. Students seem prone to overlook this rule and to make one of the following errors:

(1) Dividing the cash in the profit and loss ratio.
(2) Dividing the cash in the original capital ratio.

Dividing the cash in the profit and loss ratio.—The following statement (based on the preceding illustration) shows the effect of dividing the cash in the profit and loss ratio, instead of dividing the loss in the profit and loss ratio:

D AND *E*
Statement of Capital Accounts

	D	*E*	Together
Capitals before realization	$20,000 00	$10,000 00	$30,000 00
Cash (in P & L ratio)	12,000 00	12,000 00	24,000 00
Remaining balances	Cr $ 8,000 00	Dr. $ 2,000 00	$ 6,000 00

This division of the cash makes *D* bear a loss of $8,000.00, while *E* actually gains $2,000.00; the loss of $6,000.00 should have been borne equally.

Dividing the cash in the original capital ratio.—The following statement shows the effect of dividing the cash in the original capital ratio, instead of first charging off the loss and then paying the partners their resulting balances.

D AND *E*
Statement of Capital Accounts

	D	*E*	Together
Capitals before realization	$20,000 00	$10,000 00	$30,000 00
Cash (in original capital ratio)	16,000 00	8,000 00	24,000 00
Remaining balances	$ 4,000 00	$ 2,000 00	$ 6,000 00

This incorrect procedure results in dividing the loss in the capital ratio instead of dividing it equally, as agreed.

Case 2.—This case illustrates the following conditions.

Realization of assets completed before payments are made to partners.
Losses not sufficient to exhaust any partner's capital.
A loan from a partner.

The following is a condensed trial balance of a partnership prior to dissolution:

G, Capital		$15,000 00
H, Capital		10,000 00
G, Loan		5,000 00
Assets	$35,000 00	
Liabilities		5,000 00
	$35,000 00	$35,000.00

The assets are sold for $30,000 00. Since nothing is said concerning the profit and loss ratio, it must be assumed that profits and losses are shared equally. The liquidation is shown below:

Statement of Liquidation

	Liabilities	*G*, Loan	*G*, Capital	*H*, Capital
Balances before realization	$5,000	$5,000	$15,000	$10,000
Loss on realization			2,500	2,500
Capital balances after realization			$12,500	$ 7,500
Distribution of cash.				
Liabilities	5,000			
G, Loan		5,000		
Partners' capitals			12,500	7,500

This case illustrates the general rule that cash distributions should be made in the following order of priority: (1) to outside creditors, in payment of liabilities; (2) to partners, in payment of loans from them; and (3) to partners, in liquidation of their capital investments. However, this rule is subject to certain exceptions, which are illustrated in subsequent cases.

Case 3.—This case illustrates the following conditions:

Realization of assets completed before payments are made to partners.
Partnership solvent and able to pay its creditors in full.
Two partners; one partner has a debit balance in his Capital account after realization; the other partner has a credit balance. No partners' loans.

The illustration is based on the following condensed trial balance showing the condition before the realization of the assets.

I, Capital		$15,000 00
J, Capital		3,000 00
Assets	$30,000 00	
Liabilities		12,000 00
	$30,000 00	$30,000 00

Profits and losses are shared equally. The assets realize $22,000.00.

Statement of Liquidation

	Liabilities	*I*, Capital	*J*, Capital
Balances before realization	$12,000.00	$15,000 00	$3,000 00
Loss on realization		4,000 00	4,000 00
Capitals after realization		$11,000 00	$1,000 00*
Distribution of cash			
Liabilities	12,000 00		
I, Capital		10,000 00	
Balances		$ 1,000 00	$1,000 00*

* Debit balance

In fulfillment of his agreement to bear one half of any loss, *J* should pay *I* the $1,000.00 balance of his account. Otherwise *I* will bear $5,000.00 of the Loss and *J* will bear only $3,000.00.

Case 4.—This case illustrates the following conditions:

Realization of assets completed before payments are made to partners.

Partnership solvent and able to pay its creditors in full.

Two partners; one partner has a debit balance in his Capital account after realization, the other partner has a credit balance. Both partners have Loan accounts with credit balances.

The credit balance in a partner's Loan account should not be paid to him in full if there is a debit balance in his Capital account. The debit balance in the Capital account represents a debt owed by the partner to the partnership; the credit balance in the Loan account represents a debt owed by the partnership to the partner. Enough of the loan should be transferred to the Capital account to make good the debit balance in the Capital account, and only the remainder of the loan should be paid to the partner. This is called exercising the right of offset.

If the entire credit balance in the Loan account were

paid to the partner, without making any offset, the partner might refuse, or be unable, to pay in the debit balance of his Capital account.

The entire loan should not be transferred to the Capital account. Loans take precedence over capitals and should be paid before the capitals. If the entire loan were transferred to the Capital account, the priority of the unapplied balance of the loan would be disregarded.

X and *Y* share profits in the ratio of 70% and 30%, respectively. Their trial balance prior to realization was:

X, Capital		$20,000 00
Y, Capital		18,000 00
Assets	$87,000 00	
Liabilities		15,000 00
X, Loan		10,000 00
Y, Loan		24,000 00
	$87,000 00	$87,000 00

The assets were sold for $55,000.00 Following are the journal entries to record the realization and liquidation:

Cash		55,000 00	
X, Capital		22,400 00	
Y, Capital		9,600 00	
Assets			87,000 00
To record the sale of assets, having a book value of $87,000.00, for $55,000 00, the resulting loss of $32,000 00 being divided between the partners in their profit and loss ratio of 70% and 30%.			
Liabilities		15,000 00	
Cash			15,000 00
To record the payment of the liabilities.			
X, Loan		2,400.00	
X, Capital			2,400 00
To exercise the right of offset, making good from *X*'s Loan account the deficit in his Capital account caused by.			
Loss on realization	22,400 00		
Capital before realization	20,000 00		
Debit balance	2,400.00		
X, Loan		7,600 00	
Y, Loan		24,000 00	
Cash			31,600 00
To record the payment of the partners' loans.			
Y, Capital		8,400 00	
Cash			8,400 00
To record the payment of *Y*'s capital.			

The settlement could be shown in statement form as follows:

Statement of Liquidation

	Assets	Liabilities	X, Loan	Y, Loan	X, Capital	Y, Capital
Balances before realization	$87,000	$15,000	$10,000	$24,000	$20,000	$18,000
Loss on realization	32,000				22,400	9,600
Balances after realization	$55,000	$15,000	$10,000	$24,000	$ 2,400*	$ 8,400
Offset against loan			2,400		2,400	
Balances after offset	$55,000	$15,000	$ 7,600	$24,000	$ —	$ 8,400
Distribution of cash						
Liabilities	$15,000	15,000				
Partners' loans	31,600		7,600	24,000		
Partner's capital	8,400					8,400
Total cash	$55,000					

* Capital deficit

Case 5.—This case illustrates the following conditions.

Realization of assets completed before payments are made to partners.

Partnership solvent and able to pay its creditors in full.

Three partners, one with a debit balance in his Capital account after realization. No partners' loans.

This case is intended to illustrate the procedure to be followed when there are three or more partners, one of whom has a Capital account which has been reduced to a debit balance by losses. In such a situation, it will be impossible to pay in full the partners who have credit balances, unless the partner with a debit balance pays in the amount thereof. But suppose that it is desired to distribute the cash on hand before the partner with a debit balance pays in the amount thereof, and before it is known whether he will be able to do so. The question is. How should the cash be divided?

The important thing to remember is that, if the partner with a debit balance fails to pay in, this debit balance will have to be charged off as a loss. The other partners will have to bear this loss in their profit and loss ratio. Therefore the cash on hand should be distributed in such a way as to leave them with exactly the right balances to absorb the loss. In other words, the partners with credit balances should

be paid *down to* the amounts with which they would be charged if the partner with the debit balance failed to make good this balance.

To illustrate, R, S, and T share profits in the ratio of 50%, 30%, and 20%, respectively. After payment of their liabilities in full, preparatory to liquidation, their trial balance appears as follows:

R, Capital		$10,000 00
S, Capital		26,100 00
T, Capital		23,900 00
Assets	$60,000 00	
	$60,000 00	$60,000 00

The assets are sold for $38,000.00. The following statement shows how the $38,000.00 should be distributed.

Statement of Capitals

	R	S	T	Together
Capitals before realization	$10,000 00	$26,100 00	$23,900 00	$60,000 00
Loss on realization	11,000 00	6,600 00	4,400 00	22,000 00
Balances after realization.	$ 1,000 00*	$19,500 00	$19,500 00	$38,000 00
Cash distributed		18,900 00	19,100 00	38,000 00
Balances after distribution	$ 1,000 00*	$ 600 00	$ 400 00	

* Indicates debit balance

The payments made to S and T were determined thus: The profit and loss ratio is: R, 50%; S, 30%, and T, 20%. If R fails to pay in his debit balance of $1,000.00, the loss will have to be divided between S and T in their ratio of 30 and 20, or three fifths and two fifths. Therefore S is paid down to three fifths of $1,000.00, or $600 00, and T is paid down to two fifths of $1,000 00, or $400.00 If R fails to pay in the $1,000 00, S and T will have balances in their accounts exactly equal to the losses with which they will be charged, if R does pay in the $1,000 00, S will be paid $600.00 and T will be paid $400.00.

Wrong methods.—Problems of this type are frequently solved by actually charging off the debit balance and setting up a statement like the one on the following page.

This method results in the same cash distribution as the correct method. The error lies in actually charging off R's debit balance before it is known positively that R will not pay it in.

Statement of Capitals

		R		*S*		*T*	Together
Capitals before realization		$10,000		$26,100		$23,900	$60,000
Loss on realization		11,000		6,600		4,400	22,000
Balances after realization		$ 1,000*		$19,500		$19,500	$38,000
Debit balance charged off	Cr	1,000	Dr.	600	Dr	400	
Resulting balances		—		$18,900		$19,100	$38,000
Cash distributed				18,900		19,100	38,000

* Debit balance

Another wrong method is to pay the partners who have credit balances in the ratio of these credit balances. Thus:

Statement of Capitals

	R	*S*	*T*	Together
Capitals before realization	$10,000 00	$26,100 00	$23,900 00	$60,000 00
Loss on realization	11,000 00	6,600 00	4,400 00	22,000 00
Balances after realization.	$ 1,000 00*	$19,500 00	$19,500 00	$38,000 00
Cash distributed		19,000 00	19,000 00	38,000 00
Resulting balances	$ 1,000 00*	$ 500 00	$ 500 00	

* Debit balance

In this statement, the cash is divided equally because the capital balances of *S* and *T* are equal after the realization loss is charged off. But this procedure is incorrect. If *R*'s account cannot be collected from him, *S* will be charged with $600.00 although he has only $500.00 in his account, and *T* will be charged with $400 00 although he has $500.00 in his account. *T* will then have to try to collect $100.00 from *S*, which he may not be able to do.

Case 6.—This case illustrates the following conditions:

Realization of assets completed before payments are made to partners.

Partnership insolvent and unable to pay its creditors in full.

Two partners, both with debit balances in their Capital accounts after realization. No partners' loans.

Assume the following trial balance before realization:

K, Capital		$ 3,000 00
L, Capital		2,000 00
Accounts Payable		20,000 00
Assets	$25,000 00	
	$25,000 00	$25,000 00

Profits and losses are shared equally. The assets are sold for $17,000 00.

Statement of Liquidation

	Liabilities	*K*, Capital	*L*, Capital
Balances before realization	$20,000.00	$3,000 00	$2,000 00
Loss on realization		4,000 00	4,000 00
Resulting balances	$20,000 00	$1,000 00*	$2,000 00*
Cash payments to creditors	17,000 00		
Final balances	$ 3,000 00	$1,000 00*	$2,000 00*

* Debit balance

The creditors have a claim against the partners for the $3,000.00 of unpaid liabilities. It is not necessary that they consider the debit balances of the two partners; that is, they have the right to enforce collection in full from either of the partners. Assuming that the creditors collect the entire amount from *K*, an entry should be made debiting the liability accounts and crediting *K*'s capital. Continuing the statement.

	Liabilities	*K*, Capital	*L*, Capital
Balances—as above .	$3,000 00	$1,000 00*	$2,000 00*
Liabilities paid by *K*	Dr. 3,000 00	Cr. 3,000 00	
Resulting balances .	—	$2,000 00	$2,000 00*

* Debit balance

K, who now has a credit balance of $2,000.00, has a claim against *L* for this amount.

Case 7.—This case illustrates the following conditions:

Realization of assets completed before payments are made to partners.

Partnership insolvent and unable to pay its creditors in full.

Some partners have debit balances and others have credit balances after charging off losses on realization. No partners' loans.

It is possible for one or more partners to have credit balances in their Capital accounts, even though the partnership is insolvent, but at least one of the partners will, in that case, have a debit balance exceeding the sum of the credit balances. To illustrate, *P*, *Q*, and *R* draw off the following trial balance preparatory to liquidation:

P, Capital		$ 3,000 00
Q, Capital		8,000 00
R, Capital		9,000 00
Liabilities		20,000 00
Assets	$40,000 00	
	$40,000 00	$40,000 00

Profits and losses are shared equally. The assets are sold for $19,000.00. Following is the statement showing the liquidation:

Liquidation Statement

	Liabilities	*P*, Capital	*Q*, Capital	*R*, Capital
Balances before realization	$20,000 00	$3,000 00	$8,000 00	$9,000 00
Loss on realization		7,000 00	7,000 00	7,000 00
Balances after realization	$20,000 00	$4,000 00*	$1,000 00	$2,000 00
Cash payments to creditors .	19,000 00			
Final balances	$ 1,000 00	$4,000 00*	$1,000 00	$2,000 00

* Debit balance

In accordance with the partnership agreement concerning the sharing of profits and losses, *P* should pay in the $4,000.00 debit balance of his account. If he does so, the $4,000.00 will be sufficient to pay the creditors and the other two partners. But the creditors are not bound by the partnership agreement, and may attempt to enforce payment from any partner. Various conditions may therefore develop, some of which are illustrated below

(1) *P* pays in the $4,000 00 debit balance in his account

	Liabilities	*P*, Capital	*Q*, Capital	*R*, Capital
Balances—as above	$1,000 Cr	$4,000 Dr.	$1,000 Cr.	$2,000 Cr
P pays in		4,000 Cr.		
Final cash payments	1,000 Dr		1,000 Dr	2,000 Dr

(2) The creditors collect $1,000.00 from *P*, and no further collections are received from him.

	Liabilities	*P*, Capital	*Q*, Capital	*R*, Capital
Balances—as above	$1,000 Cr.	$4,000 Dr.	$1,000 Cr	$2,000 Cr.
P pays creditors ...	1,000 Dr	1,000 Cr		
P's account written off. .		3,000 Cr	1,500 Dr.	1,500 Dr
Balances			$ 500 Dr.	$ 500 Cr.

Q should pay *R* $500.00.

(3) The creditors collect $1,000 00 from *Q*, and it is impossible to make any collection from *P*

	Liabilities	*P*, Capital	*Q*, Capital	*R*, Capital
Balances—as above	$1,000 Cr	$4,000 Dr	$1,000 Cr	$2,000 Cr.
Q pays creditors	1,000 Dr		1,000 Cr.	
P's account written off		4,000 Cr	2,000 Dr	2,000 Dr.

Case 8.—This case illustrates the following conditions:

Realization of assets completed before payments are made to partners.

Partnership insolvent and unable to pay its creditors in full.

One or more partners insolvent.

This case is intended to explain the legal rights of creditors of an insolvent partnership and the rights of creditors of an insolvent partner. The legal rules which apply may be stated as follows:

The creditors of the partnership have a right to be paid in full from the firm assets, before the creditors of the individual partners have any claim against the firm assets.

After the firm creditors have been paid, the creditors of a partner with a credit balance may have recourse against his partnership interest to the extent of such credit balance.

The creditors of a partner have a right to be paid in full from his private assets before the creditors of the firm have any claim against these assets.

After a partner's personal creditors have been paid, the creditors of the partnership have access to the residue of his assets regardless of whether he has a credit or a debit balance, provided the firm creditors have already exhausted the firm assets.

These rules may be summarized as follows:

The partnership assets must be applied first to the payment of partnership debts, and each partner's separate

estate must be applied first to the payment of his own creditors.

To illustrate, assume that A, B, and C, sharing profits and losses equally, draw off the following trial balance preparatory to liquidation

A, Capital		$ 5,000 00
B, Capital		14,000 00
C, Capital		1,000 00
Liabilities		40,000 00
Assets	$60,000 00	
	$60,000 00	$60,000 00

The assets are sold for $36,000.00. The liquidation statement shows the distribution of the loss, and the partial payment of the partnership creditors, as follows:

Liquidation Statement

	Liabilities	A, Capital	B, Capital	C, Capital
Balances before realization	$40,000	$5,000	$14,000	$1,000
Loss on realization ($24,000 00)		8,000	8,000	8,000
Balances after realization	$40,000	$3,000*	$ 6,000	$7,000*
Payment of creditors	36,000			
Final balances	$ 4,000	$3,000*	$ 6,000	$7,000*

* Debit balance

An investigation of the partners' personal balance sheets discloses the following information:

	Assets	Liabilities
A	$ 1,000 00	$ 1,000 00
B	2,000 00	10,000 00
C	15,000 00	1,000 00

Further rights of partnership creditors.—The partnership creditors, who have had all of the firm assets applied to the payment of the firm debts, and who still have claims of $4,000.00, cannot make any collections from A or B, because the private assets of these partners are only sufficient or are insufficient to pay their personal debts. They can, however, collect the entire $4,000.00 from C. It is immaterial whether C's Capital account shows a debit or a credit balance. The only essential fact is that C will have $14,000.00 of assets after paying his private debts. Assuming that the partnership creditors collect the $4,000.00 from C, this fact would be shown on the liquidation statement as follows:

	Liabilities	A, Capital	B, Capital	C, Capital
Balances (as above)	$4,000	$3,000*	$6,000	$7,000*
Payment of liabilities by C	Dr. 4,000			Cr. 4,000
Resulting balances		$3,000*	$6,000	$3,000*

* Debit balance

Rights of creditors of A.—A has $1,000.00 of personal assets and owes $1,000.00 of liabilities to separate creditors. But, after the partnership losses are charged off, A has a debit balance of $3,000.00 in his Capital account. This means that A is obligated to pay $3,000.00 into the firm. This $3,000 00 is not a partnership debt, but is a personal obligation of A to make a contribution to the firm; the obligation arose from A's profit and loss sharing agreement with his partners. Unless the $3,000.00 contribution is made by A, his partners will bear more than their agreed shares of the loss.

According to bankruptcy and common-law decisions, A's $1,000.00 of assets should be applied ratably toward the payment of his $3,000.00 debt to the firm and his debts of $1,000 00 to outsiders, as follows:

	Debt	Payment
To the firm	$3,000 00	$ 750 00
To outsiders	1,000 00	250 00
Total	$4,000 00	$1,000 00

However, the rule is different under the Uniform Partnership Law, in force in about half of the states, which provides that:

"Where a partner has become bankrupt or his estate is insolvent the claims against his separate property shall rank in the following order:

I. Those owing to separate creditors.
II. Those owing to partnership creditors.
III. Those owing to partners by way of contribution."

Under this rule, all of A's assets would go to his separate creditors, who would be paid in full, and no contribution would be made by A to the partnership, in payment of his $3,000.00 debit balance.

Rights of creditors of B.—The creditors of B, after receiving

his assets of $2,000.00, will have a further claim of $8,000.00. Toward the satisfaction of this claim, *B*'s creditors can attach any interest which he may have in the partnership The amount and nature of *B*'s interest in the partnership will depend upon whether or not a contribution is received from *A*.

If a $750 00 contribution is received from *A*, the accounts will stand as follows:

Statement of Capitals

	A	*B*	*C*
Balances (See page 65)	$3,000 00*	$6,000 00	$3,000 00*
Contribution from *A*	750 00		
Balances	$2,250 00*	$6,000 00	$3,000 00*
Loss on *A*'s account	2,250 00	1,125 00*	1,125 00*
Balances	—	$4,875 00	$4,125 00*

* Debit

B has a partnership interest of $4,875.00, represented by the $750.00 of cash on hand, received from *A*, and his $4,125.00 claim against *C*. *B*'s private creditors are entitled to these amounts in payment of *B*'s liabilities to them.

However, if no contribution is received from *A*, the accounts will stand as follows:

Statement of Capitals

	A	*B*	*C*
Balances (See page 65)	$3,000 00*	$6,000 00	$3,000 00*
Loss on *A*'s account	3,000 00	1,500 00*	1,500 00*
Balances	—	$4,500 00	$4,500 00*

* Debit.

B now has a partnership interest of $4,500.00, represented by his claim against *C*. *B*'s private creditors are entitled to a contribution of $4,500.00 from *C*.

Rights of creditors of C —No problems arise with respect to *C*'s liabilities, because his assets are sufficient to meet all of the claims against him.

CHAPTER 35

PARTNERSHIPS (Concluded)

Liquidation in Installments

Rule for installment payments to partners.—In the illustrative cases in the preceding chapter, the assets were all realized before any payments were made to the partners. Hence all possible losses on the realization of the assets were known and could be charged to the partners before any cash payments were made to them.

But partnerships are sometimes liquidated in installments. That is, some of the assets are realized, the liabilities are paid, and the balance of the cash is distributed to the partners More assets are then realized, and the cash thus obtained is distributed among the partners This process continues until all of the assets have been realized and the proceeds thereof have been paid to the partners in installments.

When all assets are realized before any payments are made to partners (as in the cases in the preceding chapter), each partner is charged with his entire loss before receiving any money. But when payments are made to partners in installments, they receive money before it is known what losses will be incurred and charged to them. The question then is. How shall the installments be distributed among them? And the answer is: In such a way as to leave them, if possible, with capitals sufficient to bear any possible loss. As all of the remaining non-cash assets may be lost, the rule for installment payments should be: Pay the partners in such a way as to reduce their accounts to their profit and loss ratios of the remaining non-cash assets.

This procedure is illustrated by the following cases.

Case 9.—This case illustrates the following conditions:

Payments are made to partners in installments before assets are fully realized.

Each partner's capital is in excess of his share of possible future losses.

A, *B*, *C*, and *D*, sharing profits and losses equally, draw off the following trial balance, preparatory to dissolution:

A, Capital		$15,000 00
B, Capital		13,000 00
C, Capital		12,000 00
D, Capital		10,000 00
Liabilities		5,000 00
Assets	$55,000 00	
	$55,000 00	$55,000 00

They sell for $24,000.00 assets carried at $25,000.00, pay the liabilities of $5,000.00, and have $19,000.00 to distribute among the partners. The distribution among the partners is shown by the following statement:

Statement of Partners' Capitals

	A	*B*	*C*	*D*	Together
Balances before realization	$15,000	$13,000	$12,000	$10,000	$50,000
Loss on realization	250	250	250	250	1,000
Balances	$14,750	$12,750	$11,750	$ 9,750	$49,000
Cash	7,250	5,250	4,250	2,250	19,000
Balances after first distribution	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$30,000

It should be noted that the Capital accounts are now reduced to the profit and loss ratio; as the partners share profits and losses equally, the Capital accounts are reduced to equality. It was perfectly safe to distribute the cash in the manner shown, because, even if all of the $30,000.00 of non-cash assets are lost, each partner has been left with enough capital to bear his share of the loss.

To compute the amount of cash to give to each partner, it is advisable to prepare working papers (in addition to the statement of capitals) in the following form:

	A	*B*	*C*	*D*	Together
Profit and loss ratio	(25%)	(25%)	(25%)	(25%)	
Total of capitals after loss					$49,000
Cash for division					19,000
Possible loss—in P & L ratio	$7,500	$7,500	$7,500	$7,500	$30,000

These possible losses are then entered in the capital statement in the following manner, before the cash distribution is entered:

Statement of Partners' Capitals

	A	B	C	D	Together
Balances before realization	$15,000	$13,000	$12,000	$10,000	$50,000
Loss on realization	250	250	250	250	1,000
Balances	$14,750	$12,750	$11,750	$ 9,750	$49,000
Cash					19,000
Balances after first distribution	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$30,000

The cash distribution is then entered, each partner receiving enough to reduce his account to the "balance after first distribution."

Each succeeding distribution should be made in such a manner as to leave the partners' balances in their profit and loss ratio. To illustrate, suppose that two more installments are paid before the liquidation is completed, as follows:

Second installment.	
Assets realized—book value	$20,000 00
Loss on realization	2,000 00
Cash for division	$18,000 00
Third installment:	
Assets realized—book value.	$10,000 00
Loss on realization	4,000 00
Cash for division	$ 6,000 00

The complete statement of the partners' capital accounts appears below:

Statement of Partners' Capitals

	A	B	C	D	Together
Balances before realization.	$15,000	$13,000	$12,000	$10,000	$50,000
Loss on realization	250	250	250	250	1,000
Balances	$14,750	$12,750	$11,750	$ 9,750	$49,000
Cash—first distribution	7,250	5,250	4,250	2,250	19,000
Balances	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$30,000
Loss on realization	500	500	500	500	2,000
Balances	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$28,000
Cash—second distribution	4,500	4,500	4,500	4,500	18,000
Balances	$ 2,500	$ 2,500	$ 2,500	$ 2,500	$10,000
Loss on realization	1,000	1,000	1,000	1,000	4,000
Balances	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 6,000
Cash—third distribution	1,500	1,500	1,500	1,500	6,000

No partner is defrauded in any way by this method of paying in installments. This fact may be shown by assuming that no payments had been made until after the realization was

completed. The total loss and the total cash available for distribution would have been:

	Loss	Cash for Partners
First period	$1,000 00	$19,000 00
Second period	2,000 00	18,000 00
Third period	4,000 00	6,000 00
Totals	$7,000 00	$43,000 00

The distribution of the total loss and the distribution of the total available cash would have been shown in the statement of capitals as follows

Statement of Partners' Capitals

	A	B	C	D	Together
Balances before realization	$15,000	$13,000	$12,000	$10,000	$50,000
Loss on realization	1,750	1,750	1,750	1,750	7,000
Cash distribution	$13,250	$11,250	$10,250	$ 8,250	$43,000

By the installment method, the partners have been charged with exactly these losses and have been paid these amounts of cash, as shown below.

Losses Charged to Partners

	A	B	C	D	Together
First realization	$ 250 00	$ 250 00	$ 250 00	$ 250 00	$1,000 00
Second realization.	500 00	500 00	500 00	500 00	2,000 00
Third realization	1,000 00	1,000 00	1,000 00	1,000 00	4,000 00
Totals (as above)	$1,750 00	$1,750 00	$1,750 00	$1,750 00	$7,000 00

Cash Distributed to Partners

	A	B	C	D	Together
First distribution	$ 7,250	$ 5,250	$ 4,250	$2,250	$19,000
Second distribution	4,500	4,500	4,500	4,500	18,000
Third distribution	1,500	1,500	1,500	1,500	6,000
Totals (as above)	$13,250	$11,250	$10,250	$8,250	$43,000

Hence no injustice has been done.

Wrong method.—The preceding illustration shows that no injustice is done by taking the precaution of making cash distributions in such a manner as to reduce the partners' accounts to the profit and loss ratio of the remaining assets. To show what danger is incurred by failing to take this precaution, let us take another case and assume that the first distribution is made in the ratio of the capitals after the

realization loss has been charged off.

A, *B*, *C*, and *D* were partners sharing profits in the ratio of 40%, 25%, 25%, and 10%, respectively. The following trial balance was drawn off in preparation for liquidation:

A, Capital		$24,000 00
B, Capital		27,500 00
C, Capital		22,500 00
D, Capital		16,000 00
Assets	$90,000 00	
	$90,000 00	$90,000 00

Assets having a book value of $50,000.00 were sold for $40,000.00. The liquidator unwisely distributed the $40,000 00 in the ratio of the capitals after charging off the $10,000 00 loss. The statement of capitals, after the first distribution was made, appeared as follows:

Statement of Partners' Capitals

	A	*B*	*C*	*D*	Together
Balances before realization	$24,000	$27,500	$22,500	$16,000	$90,000
Loss on realization	4,000	2,500	2,500	1,000	10,000
Balances	$20,000	$25,000	$20,000	$15,000	$80,000
Cash—in ratio of capitals	10,000	12,500	10,000	7,500	40,000
Resulting balances	$10,000	$12,500	$10,000	$ 7,500	$40,000

In distributing the $40,000.00, the liquidator used the capital ratio after dividing the $10,000.00 loss, and paid each partner one half of the balance at his credit. The unwisdom of this procedure became evident when it was found that only $10,000.00 could be realized from the remaining assets. The liquidator then continued his statement as follows:

Statement of Partners' Capitals—(*Continued*)

	A	*B*	*C*	*D*	Together
Balances—as above	$10,000	$12,500	$10,000	$7,500	$40,000
Loss on realization	12,000	7,500	7,500	3,000	30,000
Balances	$ 2,000*	$ 5,000	$ 2,500	$4,500	$10,000

* Debit balance

At this point *A*'s account had a debit balance of $2,000.00, and it was necessary to collect this $2,000 00 from *A* in order to pay the other three partners in full. But the liquidator was unable to collect the $2,000.00, and *B*, *C*, and *D* could hold the liquidator liable for causing them this loss by paying

$10,000.00 to *A* instead of holding enough of a balance in *A*'s account to cover all possible loss on realization.

The liquidator should have safeguarded his own and the partners' interests by making the distribution as follows:

Statement of Partners' Capitals

	A	*B*	*C*	*D*	Together
Balances before realization	$24,000	$27,500	$22,500	$16,000	$90,000
Loss on realization	4,000	2,500	2,500	1,000	10,000
Balances after realization	$20,000	$25,000	$20,000	$15,000	$80,000
Cash	4,000	15,000	10,000	11,000	40,000
Balances in P & L ratio	$16,000	$10,000	$10,000	$ 4,000	$40,000

Each partner would thus have been left with enough capital to absorb his share of the loss, even if the entire $40,000.00 of non-cash assets had been lost. Assuming, as above, a final realization of $10,000.00 and a loss of $30,000.00, the final realization and distribution to the partners would be as indicated in the following statement.

Statement of Partners' Capitals—(*Continued*)

	A	*B*	*C*	*D*	Together
Balances—as above	$16,000	$10,000	$10,000	$4,000	$40,000
Loss on realization	12,000	7,500	7,500	3,000	30,000
Balances	$ 4,000	$ 2,500	$ 2,500	$1,000	$10,000
Cash	4,000	2,500	2,500	1,000	10,000

Case 10.—This case illustrates the following conditions:

Payments are made to partners in installments before assets are fully realized.

One partner's capital is less than his possible future loss.

If any partner's capital, before a cash distribution is made, is less than his possible loss on the assets which will remain after the distribution, it is unwise to pay him anything.

In such instances the distribution of cash installments should be made as follows:

The partner with a capital smaller than his share of a total loss should be paid nothing.

The other partners should be left with capital balances sufficient to absorb:

(1) Their own shares of a total possible loss.
(2) Their shares of the loss which might result from a partner's failure to pay in a debit balance.

To illustrate, assume that four partners have capitals and share profits as follows

Partner	Capitals	P & L Ratio
A	$20,000 00	25%
B	40,000 00	20%
C	50,000 00	25%
D	60,000 00	30%

All liabilities have been paid. The partnership is dissolved, and the process of realization and liquidation extends over five months, as follows:

	Assets Realized	Loss	Cash to Partners
First Month	$50,000 00	$10,000 00	$40,000 00
Second Month	40,000 00	2,000 00	38,000 00
Third Month	30 000 00	4,000 00	26,000 00
Fourth Month	35,000 00	5,000 00	30,000 00
Fifth Month	15,000 00	6,000 00	9,000 00

The monthly cash distributions are computed in the following manner.

(1) Charge off the loss on realization, and show in the statement of capitals the balance at each partner's credit after dividing the loss.
(2) On working papers, set down the total capitals before distributing the cash; deduct the cash on hand for distribution; and thus compute the remaining non-cash assets, or total possible loss.
(3) Indicate on the working papers the loss which would be charged to each partner in case of a total loss.
(4) Compare each partner's capital before distributing the cash (per the statement of capitals) with his possible loss (per the working papers).
(5) If any partner's capital is less than his possible loss, indicate on the working papers how this debit balance would be charged to the other partners in case of a total loss and in case of the partner's inability to pay the debit balance.
(6) Add the possible losses shown in (3) and (5), and thus

ascertain the total loss each partner may be called upon to bear for himself and for an insolvent partner with a debit balance.

(7) Enter these amounts in the statement of capitals, and pay the partners down to these balances.

If this method is applied to the present case, the partners will be charged with monthly losses and payments as indicated in the following statement·

Statement of Partners' Capitals

	A	*B*	*C*	*D*	Together
Original Balances	$20,000 00	$40,000 00	$50,000 00	$60,000 00	$170,000 00
First Month					
Loss	2,500 00	2,000 00	2,500 00	3,000 00	10,000 00
Balances	$17,500 00	$38,000 00	$47,500 00	$57,000 00	$160,000 00
Cash (See Working Papers		10,666 67	13,333 33	16,000 00	40,000 00
Balances	$17,500.00	$27,333 33	$34,166 67	$41,000 00	$120,000 00
Second Month:					
Loss	500 00	400 00	500 00	600 00	2,000 00
Balances	$17,000.00	$26,933 33	$33,666.67	$40,400 00	$118,000 00
Cash (See Working Papers)		10,133 33	12,666 67	15,200 00	38,000 00
Balances	$17,000 00	$16,800 00	$21,000 00	$25,200.00	$ 80,000 00
Third Month:					
Loss	1,000 00	800 00	1,000 00	1,200 00	4,000 00
Balances	$16,000 00	$16,000 00	$20,000 00	$24,000 00	$ 76,000 00
Cash (See Working Papers)	3,500 00	6,000 00	7,500 00	9,000 00	26,000.00
Balances	$12,500 00	$10,000 00	$12,500 00	$15,000 00	$ 50,000 00
Fourth Month:					
Loss	1,250 00	1,000 00	1,250 00	1,500 00	5,000 00
Balances	$11,250 00	$ 9,000 00	$11,250 00	$13,500 00	$ 45,000 00
Cash	7,500 00	6,000 00	7,500 00	9,000 00	30,000 00
Balances	$ 3,750 00	$ 3,000.00	$ 3,750 00	$ 4,500 00	$ 15,000 00
Fifth Month:					
Loss	1,500 00	1,200 00	1,500 00	1,800 00	6,000 00
Balances	$ 2,250 00	$ 1,800 00	$ 2,250.00	$ 2,700 00	$ 9,000 00
Cash	2,250 00	1,800 00	2,250 00	2,700 00	9,000 00

As each partner's capital, after the third month's loss is charged off, exceeds his possible future loss, all partners can be paid, and the partners' capitals can be reduced to the profit and loss ratio The distributions of the fourth and fifth months are then made in the profit and loss ratio, because that is also the capital ratio.

Working Papers—First Month

	A	B	C	D	Together
Profit and loss ratio	(25%)	(20%)	(25%)	(30%)	
Total capitals before distributing cash					$160,000
Less cash for distribution					40,000
Possible loss—P & L ratio	$30,000	$24,000 00	$30,000 00	$36,000	$120,000
Capital smaller than possible loss	17,500				
Additional possible loss to the other three partners	$12,500				
B—$^{20}/_{75}$ of $12,500 00		3,333 33			
C—$^{25}/_{75}$ of 12,500 00			4,166 67		
D—$^{30}/_{75}$ of 12,500 00				5,000	
Total possible losses, or balances to which partners are paid		$27,333 33	$34,166 67	$41,000	

Working Papers—Second Month

	A	B	C	D	Together
Total capitals before distributing cash					$118,000
Less cash for distribution					38,000
Possible loss—in P & L ratio	$20,000	$16,000	$20,000	$24,000	$ 80,000
Capital smaller than possible loss	17,000				
Additional possible loss to the other three partners	$ 3,000				
B—$^{20}/_{75}$ of $3,000 00		800			
C—$^{25}/_{75}$ of 3,000 00			1,000		
D—$^{30}/_{75}$ of 3,000 00				1,200	
Total possible losses, or balances to which partners are paid		$16,800	$21,000	$25,200	

Working Papers—Third Month

	A	B	C	D	Together
Total capitals before distributing cash					$76,000
Less cash for distribution					26,000
Possible loss—in P & L ratio	$12,500	$10,000	$12,500	$15,000	$50,000

Case 11.—This case illustrates the following conditions

Payments are made to partners in installments before assets are fully realized.

Two partners' capitals are less than their possible future losses.

This illustration involves no new principles. It merely shows how the safeguard principle is applied when two partners have capitals which are less than their shares of a possible future loss. Since no new principle is involved, the illustration is limited to the distribution of the first installment.

Given the following facts:

	A	B	C	D	
Capitals before realization	$40,000	$60,000	$70,000	$30,000	
Profit and loss ratio	30%	20%	40%	10%	
All liabilities paid					
Book value of assets sold the first month					$30,000
Loss on realization					6,000
Cash for distribution					$24,000

Required a statement of the partners' capitals showing the distribution of the $24,000.00, and working papers showing the computation of the amounts paid to each partner.

Statement of Partners' Capitals

	A	B	C	D	Together
Capitals before realization	$40,000	$60,000	$70,000	$30,000	$200,000
Loss on realization	1,800	1,200	2,400	600	6,000
Balances after realization	$38,200	$58,800	$67,600	$29,400	$194,000
Cash distributed		16,000		8,000	24,000
Balances after distribution	$38,200	$42,800	$67,600	$21,400	$170,000

Working Papers—First Month

	A	B	C	D	Together
Profit and loss ratio	(30%)	(20%)	(40%)	(10%)	
Total capitals before distributing cash					$194,000
Less cash for distribution					24,000
Possible loss—in P & L ratio	$51,000	$34,000	$68,000	$17,000	$170,000
Capitals smaller than possible loss	38,200		67,600		
Additional possible loss to *B* & *D*	$12,800		$ 400		$ 13,200
B—$\frac{20}{30}$ of $13,200 00		8,800			
D—$\frac{10}{30}$ of 13,200 00				4,400	
Total possible losses, and balances to which partners are paid ..		$42,800		$21,400	

Case 12.—This case illustrates the following conditions:

Payments are made to partners in installments before

assets are fully realized.

One partner has a capital less than his possible future loss.

Another partner has a capital sufficient to bear his own share of the possible future loss, but insufficient to bear also the charge if the first partner's account is thrown into a debit balance and written off.

Given the following facts:

	A	*B*	*C*	*D*	
Capitals	$20,000	$29,000	$36,000	$15,000	
Profit and loss ratio	30 %	20 %	40 %	10 %	
All liabilities paid					
Book value of assets realized first month					$15,000
Loss on realization					3,000
Cash for distribution					$12,000

Required: a statement of the capitals showing the distribution of the $12,000.00, and working papers showing the computation of the amounts paid to each partner.

Working Papers—First Month

	A	*B*	*C*	*D*	Together
Profit and loss ratio	(30 %)	(20 %)	(40 %)	(10 %)	
Total capitals before distributing cash					$97,000
Less cash for distribution					12,000
Possible loss—in P & L ratio	$25,500	$17,000.00	$34,000.00	$ 8,500 00	$85,000
Capital smaller than possible loss	19,100				
Additional possible loss to *B*, *C*, and *D*	$ 6,400				
B—2/7 of $6,400 00		1,828 57			
C—4/7 of 6,400 00			3,657.14		
D—1/7 of 6,400.00				914 29	
Totals		$18,828.57	$37,657 14	$ 9,414 29	
Capital smaller than possible loss			34,800 00		
Additional possible loss to *B* and *D*			$ 2,857 14		
B—2/3 of $2,857 14		1,904 76			
D—1/3 of 2,857 14				952 38	
Total possible loss, and balances to which partners are paid		$20,733 33		$10,366 67	

Statement of Partners' Capitals

	A	*B*	*C*	*D*	Together
Capitals before realization	$20,000	$29,000 00	$36,000	$15,000 00	$100,000
Loss on realization	900	600 00	1,200	300 00	3,000
Balances after realization	$19,100	$28,400 00	$34,800	$14,700 00	$ 97,000
Cash		7,666.67		4,333 33	12,000
Balances after distribution	$19,100	$20,733 33	$34,800	$10,366.67	$ 85,000

Payment of partners' loans in installment liquidation.—No cases have yet been considered in which partners have Loan accounts as well as Capital accounts, and in which liquidation is made in installments In such instances the rule that partners' loans are to be paid before their capitals, does not necessarily govern. The liquidator should consider the possible future loss, and remember that, by the right of offset, losses may be charged against a partner's Loan account if his capital is not sufficient to cover his share of the loss Hence the total possible future loss of each partner should be compared with the sum of his Capital and Loan account balances. One partner with a capital and no loan may receive a payment if his capital exceeds his possible loss; whereas another partner with a capital and a loan may receive nothing, because the sum of his capital and loan is insufficient to cover his possible loss.

If the liquidator proposes thus to make a payment on a partner's capital before making a payment on the Loan account of another partner, the partner with the Loan account may object on the basis of the general rule that partners' loans should be paid before distributions are made on capital accounts. In such an event the liquidator should explain that the proposed basis is the only one by which he can make any immediate payment without running the risk of causing one, or possibly more, of the partners to bear more than a proper share of the loss. If the partner with the loan refuses to sanction the liquidator's proposed capital payment, the liquidator should refuse to make any distributions to the partners until realization has progressed to the point at which each partner's capital (exclusive of loans) is sufficient to cover his share of the possible loss.

Case 13.—This case illustrates the following conditions:

Payments are made to partners in installments before

assets are fully realized.

Certain partners have Loan accounts.

Each partner's capital is sufficient to absorb his possible future loss.

Four partners, sharing profits and losses equally, draw off the following trial balance preparatory to liquidation:

A, Capital		$18,000 00
B, Capital		16,000 00
C, Capital		15,000 00
D, Capital		15,000 00
C, Loan		3,000 00
D, Loan		5,000 00
Assets	$72,000 00	
	$72,000 00	$72,000 00

Assets having a book value of $22,000 00 are sold for $20,000.00. After the loss is divided, the capitals are:

A	$17,500 00
B	15,500 00
C	14,500 00
D	14,500 00

The non-cash assets amount to $50,000.00, and a total loss of these assets would result in a charge of $12,500.00 to each partner. As each partner has a Capital account balance in excess of his possible loss, the loans can be paid in full, and payments can be made on the capitals, reducing them to $12,500.00 each.

Case 14.—This case illustrates the following conditions:

Payments are made to partners in installments before assets are fully realized.

Certain partners have loans

One partner's total capital and loan is less than his possible future loss.

The trial balance before liquidation is:

A, Capital		$25,000 00
B, Capital		15,000 00
C, Capital		5,000 00
B, Loan		3,000 00
C, Loan		7,000 00
Assets	$55,000 00	
	$55,000 00	$55,000 00

Profits and losses are shared equally. Assets having a book value of $13,000.00 are sold for $10,000.00. How should the $10,000.00 be divided?

Although the cash on hand is exactly equal to the partners' loans of $10,000.00, the problem cannot be dismissed by the statement that partners' loans should be paid before the capitals, and that the entire $10,000 00 should therefore be used for the payment of the loans from *B* and *C*. It is necessary to determine the possible future loss, and pay only those partners who have capitals and loans in excess of their possible losses.

Working Papers

	A	*B*	*C*	Together
Profit and Loss ratio	(⅓)	(⅓)	(⅓)	
Capitals—per trial balance	$25,000	$15,000	$ 5,000	$45,000
Loss on realization	1,000	1,000	1,000	3,000
Capitals after realization	$24,000	$14,000	$ 4,000	$42,000
Loans		3,000	7,000	10,000
Total capitals and loans	$24,000	$17,000	$11,000	$52,000
Cash for distribution				10,000
Possible loss—in P & L ratio	$14,000	$14,000	$14,000	$42,000
Capital and loan smaller than possible loss			11,000	
Additional possible loss to *A* and *B*			$ 3,000	
A—½ of $3,000 00	1,500			
B—½ of 3,000 00		1,500		
Total	$15,500	$15,500		

These working papers show that *C* cannot safely be paid anything, because his loan and capital balances together amount to only $11,000.00, whereas he is in danger of being charged with a loss of $14,000.00. *A* and *B* can be paid amounts which will leave each with a capital (or total capital and loan) of $15,500.00. The cash should be distributed as follows:

	Balances After Charging off Loss	Cash Distributed	Balances After Distribution
A—Capital	$24,000 00	$ 8,500 00	$15,500 00
B—Capital	14,000.00	—	14,000 00
Loan	3,000 00	1,500 00	1,500 00
C—Capital	4,000 00	—	4,000 00
Loan	7,000 00	—	7,000 00
		$10,000 00	

Unpaid liabilities.—If payments are made to partners in installments before the creditors are paid, the liquidator runs the risk of finding himself in a position where he cannot pay the creditors in full because of his inability to realize on the assets. He may be able to recover some of the payments made to the partners, and thus pay the creditors, but if he is unable to do this, he will be personally liable to the creditors. To avoid placing himself in such a position, the liquidator should either refuse to make payments to the partners until all creditors have been paid, or he should withhold sufficient cash to provide a fund with which the creditors can be paid in full, and should distribute only the remaining cash to the partners.

CHAPTER 36

VENTURE ACCOUNTS

Importance of venture accounts.—Under modern conditions of trade, venture accounts are of little practical importance. It appears desirable, however, to devote some attention to the subject, because venture problems are occasionally given in the professional examinations

Nature of ventures.—It is difficult to define a business venture, because ventures may be conducted in so many different ways. In general it may be said that a venture is a more or less speculative undertaking (usually not a part of the regular operations of the business) involving certain specific goods and terminating when these goods are disposed of.

Years ago, before the present methods of foreign trade were developed, a popular form of venture consisted of placing merchandise in charge of the captain of a vessel, to be sold or bartered at his discretion in some foreign port. With foreign trade now on a basis of regularly conducted purchases and sales, this form of venture is no longer common, but the idea that the term venture implies the shipment of merchandise still persists.

This idea is erroneous and places an unwarranted limitation on the term While it is true that the merchandise which is the subject matter of the venture may be shipped, ventures may be conducted without making a shipment. Thus, the purchase of a piece of real estate in the hope of a sale at an increased value, or a speculation in stock, is a venture although there is no shipment.

Single and joint ventures.—Just as a business may be conducted by an individual or by a partnership, so ventures may be single or joint. If the venture is conducted by one individual or business, it is a single venture, even though the

business conducting the venture is a partnership or a corporation If two or more individuals or businesses participate in the venture, furnishing capital, services, or merchandise, and sharing the profits or losses, it is a joint venture.

Single ventures.—If a venture is conducted by one individual or business as sole owner, the accounting is usually very simple. An account may be opened with the venture, and charged with the cost of the merchandise and with all expenses, and credited with the proceeds The balance of the account is the profit or loss. A consignment out is an illustration of a single venture.

Joint ventures.—If two or more individuals or businesses engage in a venture, a partnership relation exists. Each participant may contribute merchandise or money, each may pay expenses, and each will share in the resulting profit or loss. As in any other partnership, profits will be shared in accordance with any agreement; if there is no agreement, they will be shared equally, regardless of relative investments.

Joint venture accounting.—There are two distinct methods of recording the transactions of a joint venture, the method to be chosen depending upon whether the venture is to be of sufficient duration and complexity to warrant keeping a separate set of books for it. These two methods may be described as follows:

(1) No separate set of books for the venture.
Each participant records all of the venture transactions in his own books.

(2) A separate set of books for the venture.
All of the venture transactions are recorded in the venture books.
Each participant records in his own books only those transactions to which he is a party.

First method of accounting.—As ventures are usually of short duration, the first method is commonly used. Each participant opens on his own books an account with the joint venture, and an account with each of the other participants. Transactions are recorded in the books of all parties as follows:

(1) Merchandise contributions:

The party contributing the merchandise debits Joint Venture and credits Purchases, or Merchandise Contributed to Joint Venture, which is later closed to Purchases.

Each of the other participants debits Joint Venture and credits the participant making the contribution.

(2) Cash payments for the venture:

The party making the payment, either for merchandise or for expense, debits the Joint Venture account and credits Cash.

The other participants debit Joint Venture and credit the participant who made the payment.

(3) Cash given by one participant to another to be used for joint venture purposes:

The participant furnishing the money debits the account with the participant receiving it and credits Cash.

The participant receiving the money debits Cash and credits the participant providing the money.

Other participants, not parties to the transaction, debit the participant receiving the money and credit the participant furnishing it.

When this money is later spent for the venture, entries are made as indicated in (2).

(4) Sales for cash:

The participant making the sale debits Cash and credits Joint Venture.

The other participants debit the participant who received the cash and credit Joint Venture.

(5) Sales on account:

The participant making the sale debits Accounts Receivable—Joint Venture and credits the Joint Venture account.

The other participants debit the participant making the sale and credit Joint Venture.

(6) Loss from bad debts:

The participant who made the sale and is carrying the account, debits Joint Venture and credits Accounts Receivable—Joint Venture.

The other participants debit Joint Venture and credit the participant carrying the account.

(7) Expenses paid by participants:

If the expenses are paid in cash specifically for the venture, entries are made as in (2).

But the expense may have been part of a total payment charged by the participant to some expense account; in such cases, when the amount applicable to the venture is ascertained:

The participant who paid the expense debits the Joint Venture account and credits his expense account.

The other participants debit the Joint Venture account and credit the participant making the charge.

(8) Salary allowed to managing participant:

The participant receiving the salary debits Joint Venture and credits Salary.

The other participants debit Joint Venture and credit the participant who is allowed the salary.

(9) Commissions allowed to managing participant:

If commissions are allowed on purchases:

The managing participant debits Joint Venture for the cost of the merchandise plus the commission and credits Cash and Commissions Earned.

The other participants debit Joint Venture for cost plus commission and credit the participant making the purchase.

If commissions are allowed on sales:

The managing participant debits Cash (or Accounts Receivable), credits Commissions Earned, and credits Joint Venture for the net amount.

The other participants debit the participant making the sale and credit Joint Venture for the net amount.

(10) Withdrawals of cash:

The participant receiving the money debits Cash and credits the participant sending the money.

The participant sending the money debits the participant receiving it and credits Cash.

The other participants debit the participant receiving the cash and credit the participant sending it.

(11) Withdrawals of merchandise:

The participant receiving merchandise debits Purchases and credits Joint Venture.

The other participants debit the one receiving the merchandise and credit Joint Venture.

(12) Interest.

It is sometimes considered equitable to allow interest on investments from the date of each investment to the date of settlement, and to charge interest on withdrawals from the date of each withdrawal to the date of settlement.

The net credit or debit is computed, and an entry is made on each participant's books as follows.

Debit Joint Venture for total.

Credit Interest Earned for own allowance

Credit other participants for their allowances.

(13) Distribution of profit:

After the venture has been completed, the balance of the Joint Venture account will be the amount of the profit or loss. Assuming that a profit has been made, each participant will close the Joint Venture account by an entry as follows:

Debit Joint Venture for total profit.

Credit Profit on Joint Venture for own share.

Credit other participants for their shares.

(14) Final settlement

Each participant has an account with each other participant. To illustrate, assume that the books of three joint venture participants contain the following balances

	X's Books	Y's Books	Z's Books
Account with X .		\$1,000 Cr	\$1,000 Cr
Account with Y	\$1,500 Cr		1,500 Cr
Account with Z	2,500 Dr	2,500 Dr	

X is entitled to receive \$1,000.00 in final

settlement of the venture, and Y is entitled to receive $1,500.00; these amounts, totaling $2,500.00, should be paid to X and Y by Z. When Z makes the payments, the following entries should be made:

	X's Books		Y's Books		Z's Books	
Debits.	Cash	1,000	X	1,000	X	1,000
	Y	1,500	Cash	1,500	Y	1,500
Credit.	Z	2,500	Z	2,500	Cash	2,500

Illustration.—The following transactions of a joint venture will be used to illustrate the first method of making joint venture entries. (See pages 89 and 90.)

(1) June 1—A ships merchandise to C, who is to manage the venture The merchandise is valued at $3,000 00

(2) " 1—A pays freight on the merchandise, $20.00.

(3) " 1—A makes a charge for delivery services of $10 00. As he uses his own delivery equipment, the $10.00 is credited to Delivery Expense.

(4) " 1—B sends C $2,000 00 in cash

(5) " 1—B sends C a thirty-day draft for $1,000 00

(6) " 5—C buys merchandise at a cost of $1,500 00, and is allowed a 2% commission for his services

(7) " 11—C discounts B's draft, paying $3 33 discount.

(8) " 11—C purchases merchandise at a cost of $4,000 00, and is allowed a 2% commission

(9) " 17—C pays expenses, $75 00.

(10) " 24—C sells merchandise for $3,600 00 and is allowed a 2% commission.

(11) " 26—C sends A and B each one third of the net proceeds of the sale, keeping one third himself.

(12) " 30—C sells the balance of the merchandise for $6,000.00, and is allowed a 2% commission

(13) July 1—Interest is to be credited to all participants on credit entries in their accounts, and charged to them on debit entries. Interest is to be computed from date of entry to July 1 [In the case of the draft given by B to C, B is to be credited and C is to be charged with interest on the proceeds of the draft ($996 67) from the date of discount (June 11) to July 1.]

(14) " 1—Profits are divided equally

(15) " 1—Settlement is made; C sends checks to A and B

		A's Books			B's Books			C's Books		
(1)	June 1	Joint Venture	3,000 00		Joint Venture	3,000 00		Joint Venture	3,000 00	
		Purchases		3,000 00	*A*		3,000 00	*A*		3,000 00
		A contributes merchandise								
(2)	June 1	Joint Venture	20 00		Joint Venture	20 00		Joint Venture	20 00	
		Cash		20 00	*A*		20 00	*A*		20 00
		A pays freight								
(3)	June 1	Joint Venture	10.00		Joint Venture	10 00		Joint Venture	10.00	
		Delivery Expense		10 00	*A*		10 00	*A*		10 00
		A charges for delivery								
(4)	June 1	*C*	2,000 00		*C*	2,000 00		Cash	2,000 00	
		B		2,000 00	Cash		2,000 00	*B*		2,000 00
		B sends cash to *C*								
(5)	June 1	*C*	1,000 00		*C*	1,000 00		Bills Receivable	1,000 00	
		B		1,000 00	Bills Payable		1,000 00	*B*		1,000 00
		B sends 30-day draft to *C*.								
(6)	June 5	Joint Venture	1,530 00		Joint Venture	1,530 00		Joint Venture	1,530.00	
		C		1,530 00	*C*		1,530 00	Cash		1,500 00
		C buys merchandise						Commissions Earned		30 00
(7)	June 11	*B*	3 33		Interest Expense	3 33		Cash	996 67	
		C		3 33	*C*		3 33	*B*	3 33	
		C discounts *B*'s draft						Bills Rec Disc		1,000 00
(8)	June 11	Joint Venture	4,080 00		Joint Venture	4,080 00		Joint Venture	4,080 00	
		C		4,080 00	*C*		4,080 00	Cash		4,000 00
		Purchases by *C*						Commissions Earned		80 00
(9)	June 17	Joint Venture	75 00		Joint Venture	75 00		Joint Venture	75 00	
		C		75.00	*C*		75 00	Cash		75 00
		Payment of expenses by *C*								
(10)	June 24	*C*	3,528 00		*C*	3,528 00		Cash	3,600 00	
		Joint Venture		3,528 00	Joint Venture		3,528 00	Joint Venture		3,528 00
		Sale by *C*, less commission						Commissions Earned		72 00

		A's Books			B's Books			C's Books		
(11)	June 26	Cash	1,176 00		*A*	1,176 00		*A*	1,176 00	
		B	1,176 00		Cash	1,176 00		*B*	1,176 00	
		C		2,352 00	*C*		2,352 00	Cash		2,352 00
		Remittances by *C* to *A* and *B*								
(12)	June 30	*C*	5,880 00		*C*	5,880 00		Cash	6,000,00	
		Joint Venture		5,880 00	Joint Venture		5,880 00	Joint Venture		5,880 00
		Sale by *C*, less commission						Commissions Earned		120 00
(13)	July 1	Joint Venture	30 46		Joint Venture	30 46		Joint Venture	30 46	
		Interest Earned		14 17	*A*		14 17	*A*		14 17
		B		12 34	Interest Earned		12 34	*B*		12 34
		C		3 95	*C*		3 95	Interest Earned		3 95
		Credits for net interest See computation, page 91								
(14)	July 1	Joint Venture	662 54		Joint Venture	662 54		Joint Venture	662 54	
		Profit on Venture		220 85	*A*		220 85	*A*		220 85
		B		220 85	Profit on Venture		220 85	*B*		220 85
		C		220 84	*C*		220 84	Profit on Venture		220 84
		To close out profit See Venture account, page 91								
(15)	July 1	Cash	2,089 02		*A*	2,089 02		*A*	2,089 02	
		B	2,053 86		Cash	2,053 86		*B*	2,053 86	
		C		4,142 88	*C*		4,142 88	Cash		4,142 88
		Final settlement payments by *C* to *A* and *B* See explanatory personal accounts—page 92.								

Computation of Interest

(*Explanatory of entry 13*)

A—Credits								
June	1	Merchandise	$3,000 00	30	days	$15 00		
"	1	Freight	20 00	30	"	10		
"	1	Drayage	10 00	30	"	05	$15 15	
Debits								
June	26	Cash	1,176 00	5	"		98	
							$14 17	
B—Credits								
June	1	Cash	$2,000 00	30	"	$10 00		
"	11	Proceeds of draft	996 67	20	"	3 32	$13 32	
Debits								
June	26	Cash	1,176 00	5	"		98	
							$12 34	
C—Credits.								
June	5	Purchase and Commission	$1,530 00	26	"	$ 6 63		
"	11	" " "	4,080 00	20	"	13 60		
"	17	Expenses	75 00	14	"	18		
"	26	Cash to *A* and *B*	2,352 00	5	"	1 96	$22 37	
Debits								
June	1	Cash from *B*	2,000 00	30	"	$10 00		
"	11	Proceeds of *B*'s draft	996 67	20	"	3 32		
"	24	Sale less commission	3,528 00	7	"	4 12		
"	30	" " "	5,880 00	1	"	98	18 42	
							$ 3 95	

Computation of Net Profit

(*Explanatory of entry 14*)

After the interest entry (No. 13) is posted, the profit on the joint venture can be ascertained by computing the balance of the Joint Venture account Following is the account after the profit has been computed, and distributed by entry 14

Joint Venture Account

(As it will appear on books of *A*, *B*, and *C*)

June	1	Merchandise—*A*		3,000 00	June	24	Sale—*C*	3,528 00
"	1	Freight—*A*		20 00	"	30	" "	5,880 00
"	1	Delivery—*A*		10 00				
"	5	Purchase—*C*		1,530 00				
"	11	" "		4,080 00				
"	17	Expenses—*C*		75 00				
July	1	Interest		30 46				
"	1	Profit *A*	220 85					
		B	220 85					
		C	220 84	662 54				
				9,408 00				9,408 00

Participants' Accounts

After posting the entries for the transactions of the venture (1 to 12), for the interest (13), and for the distribution of profit (14), *A*'s account on the books of *B* and *C* will have a credit balance of $2,089 02, which is the amount he is entitled to receive in settlement.

B's account on the books of *A* and *C* will have a credit balance of $2,053.86, which is the amount he is entitled to receive in settlement.

C's account on the books of *A* and *B* will have a debit balance of $4,142.88, which is the amount he must pay to *A* and *B*: $2,089.02 to *A*, and $2,053.86 to *B*. After these payments have been made and recorded by entry 15, the accounts will appear as follows.

Account with *A*

(As it will appear on books of *B* and *C*)

June 26	Cash from *C*	1,176 00	June 1	Merchandise to *C*	3,000 00
July 1	" " ".	2,089 02	" 1	Freight	20 00
			" 1	Drayage . .	10 00
			July 1	Interest .	14 17
			" 1	Profit	220 85
		3,265 02			3,265 02

Account with *B*

(As it will appear on the books of *A* and *C*)

June 11	Discount on draft	3 33	June 1	Cash to *C* ..	2,000 00
" 26	Cash from *C* ..	1,176 00	" 1	Draft to *C*	1,000 00
July 1	" " " .. .	2,053 86	July 1	Interest.	12 34
			" 1	Profit ..	220 85
		3,233 19			3,233 19

Account with *C*

(As it will appear on books of *A* and *B*)

June 1	Cash from *B*	2,000 00	June 5	Purchase and commission	1,530 00
" 1	Draft from *B* .	1,000 00	" 11	Disc on *B*'s draft	3 33
" 24	Sale less commission	3,528 00	" 11	Purchase and commission .	4,080.00
" 30	Sale less commission . ..	5,880 00	" 17	Expenses paid .	75 00
			" 26	Cash to *A* and *B*	2,352 00
			July 1	Interest	3 95
			" 1	Profit. . ..	220 84
			" 1	Cash to *A*	2,089 02
			" 1	" " *B* .	2,053 86
		12,408 00			12,408 00

Uncompleted ventures.—If, at the time of closing the books, an account with an uncompleted venture appears on the books, the inventory may be entered in the account, the profit to date estimated, and the proper share taken up. If one participant makes such entries, all should do so in order to keep the Joint Venture accounts in agreement. However, since ventures are usually speculative in nature, it is generally considered hazardous to take up any profit until the completion of the venture. Therefore the conservative procedure is to leave the account unclosed, showing the facts in the balance sheet as follows, probably under the Current Asset caption:

Net Investment in Joint Venture.		
Total Investment	$1,500 00	
Less Investments of Other Participants	950 00	$550 00

If the investment in the venture is relatively small in proportion to the total assets shown by the balance sheet, it is not necessary to indicate the amount of the investment of the other participants, in such instances it is sufficient to show the net investment as a single item in the balance sheet in the manner illustrated below:

Investment in Joint Venture ..	$550 00

Second method of accounting.—While the method just described is the one usually followed, a separate set of books may be kept for the transactions of the venture.

With a separate set of books, it is not necessary to keep the Joint Venture account on the participants' books in a manner which will show the purchases, sales, and expenses of the venture. The profits will be determined from the books of the venture. Nor is it necessary for each participant to keep an account with each other participant, as the books of the venture will show the interest of each participant Each participant keeps only a Joint Venture or an Investment in Joint Venture account, charging it with what he puts into the venture and with his share of the profits, and crediting it with what he takes out He makes no record of the investments, withdrawals, and expenses of the other participants.

The following entries show how the illustrative transactions would be recorded in the books of the three participants and in the separate venture set. The entries are numbered to correspond with the statement of transactions on page 88.

	Venture Books			A's Books			B's Books			C's Books	
(1) Purchases	3,000 00		Joint Venture	3,000 00							
A		3,000 00	Purchases.		3,000 00						
(2) Expense	20 00		Joint Venture	20 00							
A		20 00	Cash		20 00						
(3) Expense	10 00		Joint Venture	10 00							
A		10 00	Expense		10 00						
(4) Cash	2,000 00					Joint Venture	2,000 00				
B		2,000 00				Cash		2,000 00			
(5) Bills Receivable	1,000 00					Joint Venture	1,000 00				
B		1,000 00				Bills Payable		1,000 00			
(6) Purchases	1,500 00										
Cash		1,500 00									
Commissions	30 00								Joint Venture	30 00	
C.		30.00							Commissions		30 00
(7) Cash	996 67					Interest	3 33				
B	3 33					Joint Venture		3 33			
Bills Rec Disc		1,000 00									
(8) Cash*	2,503 33								Joint Venture	2,503 33	
C		2,503 33							Cash		2,503 33
Purchases	4,000 00										
Cash		4,000 00									
Commissions	80 00								Joint Venture	80 00	
C		80 00							Commissions		80 00
(9) Expense	75 00								Joint Venture	75 00	
C		75 00							Cash		75 00

* Amount which *C* must have contributed from his own funds to provide the cash necessary to make the $4,000 00 purchase

	Venture Books			A's Books			B's Books			C's Books		
(10)	Cash	3,528 00								Cash	72 00	
	Commissions	72 00								Commissions		72 00
	Sales		3,600 00									
(11)	*A*	1,176 00		Cash	1,176 00		Cash	1,176 00		Cash	1,176 00	
	B	1,176 00		Joint Venture		1,176 00	Joint Venture		1,176 00	Joint Venture		1,176 00
	C	1,176 00										
	Cash		3,528 00									
(12)	Cash	5,880 00								Cash	120 00	
	Commissions	120 00								Commissions		120 00
	Sales		6,000 00									
	Sales	9,600 00										
	Purchases		8,500 00									
	Expense		105 00									
	Commissions		302 00									
	Profit & Loss		693 00									
(13)	Profit & Loss	30 46		Joint Venture	14 17		Joint Venture	12 34		Joint Venture	3 95	
	A		14 17	Interest		14 17	Interest		12 34	Interest		3 95
	B		12 34									
	C		3 95									
(14)	Profit & Loss	662 54		Joint Venture	220 85		Joint Venture	220 85		Joint Venture	220 84	
	A		220 85	Profit on J V		220 85	Profit on J V		220 85	Profit on J V		220 84
	B		220 85									
	C		220 84									
(15)	*A*	2,089 02		Cash	2,089 02		Cash	2,053 86		Cash	1,737.12	
	B	2,053 86		Joint Venture		2,089 02	Joint Venture		2,053 86	Joint Venture		1,737 12
	C	1,737 12										
	Cash		5,880 00									

The venture accounts which will appear on the various participants' books are illustrated by the following account kept by *A:*

A's Account with Joint Venture

Merchandise	3,000 00	Cash	1,176 00
Expense	20 00	Cash—Final Settlement	2,089 02
"	10 00		
Interest	14 17		
Profit	220 85		
	3,265 02		3,265 02

The capital accounts which will appear on the venture books are illustrated by the following account with *A*·

Joint Venture's Account with A

Cash	1,176 00	Merchandise	3,000 00
Cash—Final Settlement	2,089 02	Expense	20 00
		"	10 00
		Interest	14 17
		Profit	220 85
	3,265 02		3,265 02

In a similar way, *B*'s account with the venture would be reciprocal with the venture's account with *B;* and the same would apply to *C*'s accounts.

Attention is again called to the fact that the first method is the one to be used when joint venture accounts are called for and no accounting method is specified.

Interest.—The computation of interest in the preceding illustrations of the two methods of accounting, was based on the assumption that *C*, as manager of the venture, was permitted to merge the venture funds with his own, and was therefore properly chargeable with interest on advances made to him.

CHAPTER 37

INSURANCE

Introduction.—An insurance policy is a contract between an insurance company and the insured, by which the company agrees to pay the insured for a specified damage, loss, or liability, contingent upon the occurrence of some event.

Premiums are usually payable in advance. The rates represent the charge per $100.00 or $1,000 00 of insurance carried per year, and are usually computed on a standard basis which is adjusted, by local factors and indorsement clauses, to the requirements of particular cases. Policies, except those for life insurance, generally cover a period of from one to three years, rate advantages are usually obtained by purchasing policies covering a period of more than one year. Cancellation, except in rare instances, may be effected by either party upon notice to the other, a specified time must usually elapse before the cancellation becomes effective. If the policy is cancelled by the company, the premium refundable to the insured will be computed on a pro-rata basis; if the policy is cancelled by the insured, the premium refundable to him will be computed on a "short rate" basis, and will be less than the unexpired portion of the premium.

An accountant should have a knowledge of the types of insurance protection available; he should know whether changes in specific or total asset values will affect the coverage in force; he should understand the proper accounting treatment of accrued and unexpired premiums, rebates, dividends, and surrender and loan values; and he should know what accounts and records are necessary to prove an insured loss and to obtain settlement.

In this chapter we shall give especial consideration to fire, life, and workmen's compensation insurance, which present the principal accounting problems, and shall mention some of the distinguishing features of a few other important types of insurance.

Fire Insurance

General.—The hazard of fire is probably the most serious business risk covered by insurance. Property insurable against fire may be classified as.

Buildings.
Building contents· merchandise, machinery, materials, fixtures, and so forth.
Miscellaneous property. automobiles, boats, property carried in yards, and so forth.

The rates for fire insurance depend upon construction, occupancy, exposure, and protection. Construction means the material used and the number of stories in the building insured, or in the building containing the property insured Occupancy refers to any special hazards resulting from the nature of the business conducted. Exposure means the distance from other buildings, and any hazard which might arise from the proximity of dangerous buildings. Protection refers to such matters as distance from a fire hydrant, the efficiency of the fire department, the installation of automatic sprinklers, and the employment of watchmen.

The co-insurance clause.—Because losses are often only partial, there is a tendency to insure for only a portion of the value of the property To combat this tendency, policies may contain a co-insurance clause, in which the insured consents, in consideration of a reduction in the rate, to carry insurance in an amount equal to a stipulated per cent of the value of the property The following is such a clause:

"In consideration of the premium for which this policy is issued, it is expressly stipulated that, in event of loss, this company shall be liable for no greater proportion thereof than the sum hereby insured bears to 80% of the cash value of the property described herein at the time when such loss shall happen."

If the insured does not carry insurance in an amount equal to the co-insurance requirements, he is regarded as being himself a co-insurer with the insurance company; that is,

he carries a portion of the risk. For example, if, under an 80% co-insurance policy, the insured carries insurance equal to only 70% of the value of the property, he is a co-insurer for 10%. Any loss will be borne seven eighths by the company and one eighth by the insured, however, the company will not be liable for more than the face of the policy. If the policy is 80% of the sound value of the property, the company will be liable for all losses up to the face of the policy.

The operation of this clause is illustrated below.

First illustration:

Value of property	$10,000 00
Policy—80%	8,000 00
The company is liable for all losses up to $8,000.00	

Second illustration:

Value of property	$10,000 00
Policy—more than 80%	8,500 00
The company is liable for all losses up to $8,500.00	

Third illustration:

Value of property	$10,000 00
Policy—70%	7,000 00
Loss	4,000 00
The insured is a co-insurer for 1/8 of all losses, and the company's liability is 7/8 of $4,000 00, or $3,500 00	

Fourth illustration:

Value of property	$10,000 00
Policy—65%	6,500 00
Loss	4,000 00
The insured is a co-insurer for 15/80 of all losses, and the company's liability is 65/80 of $4,000 00, or $3,250.00	

Fifth illustration.

Value of property—total loss	$10,000 00
Policy—65%	6,500 00
65/80 of $10,000 00 is $8,125 00, but the policy is for only $6,500 00; hence the company's liability is $6,500 00.	

From these illustrations the following general rule may be derived. To determine the insurance company's liability under a policy with the 80% co-insurance clause. When the

policy is less than 80% of the sound value of the property, multiply the loss by a fraction, the numerator of which is the face of the policy and the denominator of which is 80% of the sound value of the property. The product is the liability of the company, except that the liability cannot be more than the face of the policy.

If the insured amount is 80% or more of the sound value of the property, the co-insurance clause does not affect the settlement.

When the policy contains a co-insurance clause, it is important to watch changing values of the insured property, caused either by additional purchases or by increases in market value. To illustrate, assume that property was purchased at a cost of $5,000.00 and insured for $4,000.00 under a policy containing an 80% co-insurance clause. Later, when the property had a sound value of $8,000.00, it was destroyed, with a loss of $4,000.00. Settlement would be made as follows.

Sound value	$8,000 00
80% thereof	6,400 00
Company's liability. 40/64 of $4,000.00, or $2,500 00	

Although of particular importance in fire insurance, co-insurance clauses may be included in policies for other types of insurance. An 80% co-insurance rate was used in the preceding illustrations because it is the usual rate in fire insurance policies, the co-insurance rates in other types of insurance policies vary greatly.

Contribution clause.—If property is insured with several companies, each company whose policy contains a contribution clause assumes a liability for only a pro-rata portion of the loss; this portion is computed by multiplying the loss by a fraction, the numerator of which is the face of the policy, and the denominator of which is.

(1) The face of all policies, if the company's policy carries no co-insurance clause (see Company *A*, below) or if the insurance carried meets the requirements of the policy (see Company *B*, below).
(2) The insurance required under the co-insurance clause, if the company's policy contains such a clause and

its requirements have not been met (see Company *C*, below).

To illustrate, assume that property having a sound value of $100,000 00 is insured under the policies described below, and that a loss of $75,000 00 is incurred. The amount collectible from each company is computed as follows:

Company	Co-Insurance Clause	Insurance Required by C-I Clause	Insurance Carried	Fraction	Loss	Amount Collectible
A	None	—	$40,000 00	$^{40}/_{80}$	$75,000 00	$37,500 00
B	75%	$75,000 00	20,000 00	$^{20}/_{80}$	75,000 00	18,750 00
C	90%	90,000 00	20,000 00	$^{20}/_{90}$	75,000.00	16,666 67
Total			$80,000 00			$72,916 67

Floater policies.—Under a floater policy, the insured property may be moved from one place to another for processing, storing, or other purposes. The property is insured, regardless of its location, within specified geographical limits, and with limitations upon the amount payable on a loss at any one location. Under this type of policy, inventory records showing the value of property at various locations are desirable for the purpose of proving losses.

Losses.—Settlements for losses are usually based on the sound value of the property at the date of the loss; that is, cost or market value new, as of that date, less depreciation. Salvage is the sound value of property saved. The amount of the loss is the sound value of the property minus the salvage.

In the event of a loss, the insured should notify the company at once, and should file a formal proof of loss, usually within sixty days and usually on a form provided by the company, showing, among other things, the cash value of the property at the time of the loss and the amount of the recovery claimed.

If the insured and the company cannot agree on the amount of the loss, each may appoint a competent, disinterested appraiser, the appraisers then appoint an umpire; if the appraisers fail to agree upon a settlement, the umpire's decision is final.

Fire loss account.—When a fire occurs, a Fire Loss account should be immediately set up. It should be charged with:

> The carrying value of the fixed assets destroyed or damaged.
> The estimated value of the inventories.
> The unexpired insurance.

It should be credited with:

> The value of the salvage.
> The settlement received from the insurance company.

The balance of the account should be closed to Surplus, and not to Profit and Loss, as it does not represent an element of normal operations.

Carrying value of assets.—If the fire occurs some time after the closing of the books, there will be accrued depreciation to record. This should be put on the books in the customary manner, by debiting depreciation accounts and crediting depreciation reserve accounts.

If all of the fixed assets are destroyed, the entire offsetting depreciation reserve should be closed to each fixed asset account, and the resulting balances of the fixed asset accounts should be closed to Fire Loss. If only a partial loss is sustained, the fixed asset accounts should be relieved of the cost of the property destroyed, and the depreciation reserves should be relieved of the depreciation provided on such property.

If the salvage is to be sold, no entries for salvage should be made until sales are effected; the Fire Loss account should be held open until that time in order to show the final surplus adjustment resulting from the fire. If the salvage is to be put back into use, the fixed asset accounts should be debited and Fire Loss credited with the agreed value.

Estimated values of inventories.—The method of estimating the value of the merchandise inventories on hand at the date of the fire, will depend upon the accounting records kept If perpetual inventories are maintained, they usually furnish the best possible evidence of quantities. If there are no perpetual inventories, the gross profit method may be

used. To illustrate, assuming an inventory of \$30,000.00 at the last closing, purchases of \$60,000.00 between the date of closing and the date of the fire, sales of \$75,000.00, and an estimated gross profit of 33⅓%, the inventory at the date of the fire might be estimated as follows:

Inventory, at date of last closing		\$30,000 00
Add purchases		60,000 00
Total		\$90,000 00
Less estimated cost of sales		
Sales	\$75,000 00	
Less gross profit—33⅓ %	25,000 00	50,000 00
Estimated inventory at date of fire		\$40,000 00

The value thus ascertained may be subject to scaling down by the adjuster for depreciation in the value of goods which were shopworn, damaged prior to the fire, or out of style.

In this connection it is important to note the effect on the estimated inventory valuation if the inventory at the date of the last closing was written down to a market value below cost, or was marked down because of depreciation or obsolescence. Assume, for instance, that the inventory at the date of the last closing cost \$30,000 00 but was written down to \$25,000 00. Using all other figures in the preceding illustration, the inventory value at the date of the fire would be reduced \$5,000.00, as shown below:

Inventory, at date of last closing		\$25,000 00
Add purchases		60,000 00
Total		\$85,000 00
Less estimated cost of sales		
Sales	\$75,000 00	
Less gross profit—33⅓ %	25,000 00	50,000 00
Estimated inventory at date of fire		\$35,000 00

It is apparent that the inventory value at the date of the fire is reduced \$5,000.00. This is the amount of the conservative provision for decreases in market value or for other losses applicable to the inventory which was on hand at the date of the last closing. But all of these goods, or a large portion of them, may have been sold, so that the inventory at the date of the fire should be stated at \$40,000.00 instead of at \$35,000.00.

It would certainly be unfortunate if the fact that a mer-

chant deducted $5,000.00 from his inventory on January 1, in order to state his profits conservatively, caused him to suffer an unwarranted loss in the estimated value of an inventory on hand at, say, the following September 1. To avoid such a loss, it is advisable to preserve inventory sheets showing both the cost and market, or depreciated, values.

The question remains concerning the entries to be made for the inventory. If desired, the books may be closed, but this would be an unusual procedure; after the inventories are set up in the usual manner, as an incident to such a closing, the value of the destroyed inventories may be transferred from the inventory accounts to the Fire Loss account. In making the closing entries and the entries transferring inventory values to the Fire Loss account, the accountant should use estimated values and not those allowed by the adjuster. If the adjuster's values were used, any extraneous loss resulting from his scaling down of values, or any extraneous profit resulting from an excess of market value at the date of the fire over cost, would be improperly merged in the operating accounts instead of being clearly shown as an extraneous item in the Fire Loss account, where it belongs.

If it is not desired to close the books at the date of the fire, the debits to Fire Loss for inventories destroyed may be offset by credits to Raw Materials Burned, Goods in Process Burned, and Finished Goods Burned. These accounts will remain open until the next closing of the books.

Unexpired insurance.—All insurance premiums expired between the date of the last closing and the date of the fire should be charged to the Insurance expense account. If the loss is so great as to exhaust the policy and cause its cancellation, all insurance unexpired at the date of the fire should be charged to the Fire Loss account. If the loss is only partial, the payment will be indorsed on the policy and the remainder of the policy will continue in force. In such cases, the Fire Loss account should be charged with such a proportion of the unexpired insurance as the indorsement bears to the face of the policy.

To illustrate, assume that, on January 1, insurance policies of $40,000.00 were carried and that the unexpired

insurance was $600.00. All policies were to expire on the following December 31. A fire occurred on September 1, and $30,000.00 was received from the insurance company The insurance premium entries should be:

Insurance	400 00	
Unexpired Insurance		400 00
To charge operations with insurance premiums expired between January 1 and September 1.		
Fire Loss	150 00	
Unexpired Insurance		150 00
To charge Fire Loss with three fourths of the $200.00 insurance premiums unexpired on September 1, the insurance company having paid $30,000 00 on policies of $40,000 00		

Desirable records.—To facilitate the preparation of a proof of loss, the following books and records are desirable:

(1) A plant ledger, with a separate account for each item of fixed property, showing cost and depreciation taken.
(2) Vouchers and supporting bills which may be submitted to the adjuster, if demanded, in proof of cost.
(3) A perpetual inventory, or inventory sheets showing both cost and marked-down values.
(4) A record showing exactly what property is insured under each policy.

An appraisal of fixed assets is extremely important from an insurance standpoint, even though it is not recorded on the books. It is of service in determining insurance requirements, under co-insurance clauses and otherwise, and in effecting settlements in case of loss.

Life Insurance

Business uses.—The following are some of the important reasons why a business may insure the lives of its owners or employees:

(1) To provide funds for the purchase of the shares of a deceased stockholder in a close corporation, and thus keep the stock under the control of interested parties.

(2) To provide funds for the payment of the capital interest of a deceased partner, without placing an undue strain on the working capital.

(3) To compensate for the loss which might result from the death of an important member of the organization.

Beneficiaries.—If the insured or his estate is the beneficiary, the premiums are virtually additional salary, and should be so recorded. Such insurance, however, is not customary.

Usually the business is named as the beneficiary. To be so named, the business must have an insurable interest in the life of the person insured. An insurable interest exists if the business has a reasonable ground for expecting some benefit or advantage from the continued life of the insured.

Premiums, dividends, and cash and loan values.—Life insurance premiums are payable in advance, usually at annual intervals, but sometimes semiannually, quarterly, or monthly. In the illustrations in this chapter, it is assumed that premiums are payable annually.

Dividends are distributions, to policy holders, of a portion of the earned surplus of mutual insurance companies. Various options may be exercised with respect to the use of dividends, but in business insurance they are probably applied most frequently as a deduction from the premiums payable. Dividends often are not payable on a policy before the end of the second year of its life.

The cash surrender value is the amount which the insurance company will pay to the insured upon cancellation of the policy; a policy usually has no cash surrender value until the end of the third policy year, although the policies of some companies provide for a surrender value at the end of the second year.

The loan value is the amount which the insurance company will loan on a policy maintained in force. The loan value at any date is equal to the cash surrender value at the end of the policy year, minus discount thereon from the loan date to the end of the policy year. If a policy has a cash surrender value at the end of the third year,

it has a loan value at the beginning of the third year, after the payment of the third year's premium. The following table shows one company's cash surrender values on a $50,000.00 straight life policy taken at the age of thirty-five; values are given here for only the earlier years of the policy. The loan values at the beginning of each year were computed by discounting the end-of-year cash values at 6%; that is, the cash values which will be available one year after making the premium payment were divided by 1 06 to determine the loan values at the date of paying the premium.

Year	Cash Surrender Value at End of Year	Loan Value at Beginning of Year
1	—	—
2	—	—
3	$1,590 50	$1,500 47
4	2,151 00	2,029 25
5	2,908 00	2,743 40
6	3,647,00	3,440 57

The premium less any dividend applied in reduction thereof is the net amount payable to the insurance company. The net premium less the increase in the cash or loan value during the year is the net expense to the insured for the year.

Accounting for net premiums and policy values.—Premiums paid should be charged to Life Insurance Expense Dividends received should be credited to the same account. If the dividends are applied in reduction of premiums, the net premium should be charged to Life Insurance Expense.

The cash or loan value of the policy should be set up as an asset, and the annual increase therein should be credited to Life Insurance Expense. When the initial value is placed on the books during the third year of the policy's life, two thirds of the value should be regarded as applicable to the first two years of the policy's life, and a Surplus adjustment should be made with respect thereto; the other one third should be regarded as a reduction of the current year's insurance expense. Term policies have no cash surrender value.

Some companies take up the increase in cash surrender value at the end of the policy year; other companies take up the increase in loan value at the beginning of the policy year. Both methods are illustrated below Dividends are

ignored in the illustrations. In the first two illustrations it is assumed that the policy anniversary date coincides with the close of the accounting period.

Cash values taken up at end of year.—This illustration is based on a straight life policy of $50,000 00, taken at the age of thirty-five, with an annual premium of $1,405 50. The cash values are those shown in the foregoing table. Entries for the first four years are given below.

First and second years:

Life Insurance Expense	1,405 50	
Cash		1,405 50
Entry at beginning of year for payment of premium		
Profit and Loss	1,405 50	
Life Insurance Expense		1,405 50
Entry at end of year to charge off expense		

Third year:

Life Insurance Expense	1,405 50	
Cash		1,405 50
Entry at beginning of year for payment of premium		
Cash Surrender Value of Life Insurance	1,590 50	
Surplus (⅔ of $1,590 50)		1,060 33
Life Insurance Expense		530 17
Entry to take up cash surrender value at end of year		
Profit and Loss ($1,405 50 − $530 17)	875 33	
Life Insurance Expense.		875.33
Entry at end of year to charge off expense.		

Fourth year.

Life Insurance Expense	1,405 50	
Cash		1,405 50
Entry at beginning of year for payment of premium		
Cash Surrender Value of Life Insurance	560 50	
Life Insurance Expense		560.50
Entry at end of year for increase in cash surrender value from $1,590 50 to $2,151 00		
Profit and Loss	845 00	
Life Insurance Expense		845 00
Entry at end of year to charge off expense		

Loan values taken up at beginning of year.—When loan values are taken up at the beginning of the year, precision in terminology might suggest the use of an account with some title such as Loan Value of Life Insurance, instead of Cash Surrender Value of Life Insurance. However, such a distinction is not usually made. Moreover, as will be shown in the final illustration, the account may at times show surrender values as well as loan values.

First and second years:

Life Insurance Expense	1,405 50	
Cash		1,405 50
Entry at beginning of year for payment of premium		
Profit and Loss	1,405 50	
Life Insurance Expense		1,405 50
Entry at end of year to charge off expense		

Third year.

Life Insurance Expense	1,405 50	
Cash		1,405 50
Entry at beginning of year for payment of premium		
Cash Surrender Value of Life Insurance	1,500 47	
Surplus (⅔ of $1,500 47)		1,000 31
Life Insurance Expense		500 16
Entry at beginning of year to take up loan value.		
Profit and Loss	905 34	
Life Insurance Expense		905 34
Entry at end of year to charge off expense		

Fourth year.

Life Insurance Expense	1,405 50	
Cash		1,405.50
Entry at beginning of year for payment of premium.		
Cash Surrender Value of Life Insurance	528 78	
Life Insurance Expense		528 78
Entry at beginning of year for increase in loan value from $1,500 47 to $2,029 25		
Profit and Loss	876 72	
Life Insurance Expense.		876 72
Entry at end of year to charge off expense.		

Advantage of taking up loan values.—The author favors taking up loan values at the beginning of the policy year, instead of cash values at the end of the policy year, for the following reasons:

(1) The asset value of the policy is more accurately reflected. It is particularly desirable to have the loan value of the policy reflected on the books and in the balance sheet if loans are made to the full amount of the available loan value. The following summary shows this fact clearly.

Beginning of Policy Year	Loans	Asset Values: Loan Value	Asset Values: Cash Value
3	\$1,500 47	\$1,500 47	—
4	2,029 25	2,029 25	\$1,590 50

Assume that the full amounts of available loans are taken, as shown in the first column; if the loan values are taken up at the beginning of each policy year, the accounts and the balance sheet will show that the asset values of the policy are equal to the loans. But if cash values are taken up at the end of each year, the books and the balance sheet will misrepresent the condition by indicating that the asset values of the policy are less than the liabilities on policy loans.

(2) A truer statement of the annual expense is obtained, particularly if the end of the policy year does not coincide with the end of the accounting period. The insurance expense for any year is the net premium paid, minus the increase in asset value during the year. However, if the books are closed during the policy year, after the premium payment has been recorded but before the increase in asset value resulting therefrom has been recorded, the true net expense for the year will not be shown.

Closing the books during the policy year.—Using the same figures as in the preceding illustration, assume that loan values are taken up at the beginning of the policy year, that September 30 is the end of the policy year, and that the books are closed on December 31. The entries are

shown by the following statement; credits are indicated by asterisks.

	Insurance Expense	Cash Surrender Value	Profit and Loss	Surplus
First policy year				
Oct 1—Premium paid	$1,405 50			
Dec 31—Expense (Note 1)	351 38*		$ 351 38	
Deferred	$1,054 12			
Second policy year				
Oct 1—Premium paid	1,405 50			
Dec 31—Expense (Note 2)	1,405 50*		$1,405 50	
Deferred	$1,054 12			
Third policy year				
Oct 1—Premium paid	1,405 50			
Loan value (Note 3)	875 27*	$1,500.47		$625 20*
Dec 31—Expense (Note 4)	905 34*		$ 905 34	
Deferred (Note 4)	$ 679 01			
Fourth policy year				
Oct 1—Premium paid	1,405 50			
Loan value increase	528 78*	528 78		
Total loan value		$2,029 25		
Dec 31—Expense (Note 5)	898 19*		$ 898 19	
Deferred...	$ 657 54			

Notes

Note 1.—The payment of premium on October 1 covers the expense for the next twelve months, three months' proportion (one fourth) is charged to Profit and Loss, and nine months' proportion (three fourths) is deferred

Note 2.—Profit and Loss should now be charged with a full year's premium; however, there is again a prepayment of premium for nine months, which should be deferred.

Note 3.—The credit for the loan value is apportioned between Surplus and Life Insurance Expense on the following basis The loan value was created by the payment of premiums for three years (thirty-six months). The expense for one year and three months (fifteen months) has already been charged to Profit and Loss, and thence to Surplus, the charge for the premiums applicable to the remaining year and nine months (twenty-one months) remains in the Life Insurance Expense account. Then:

$^{15}/_{36}$ of $1,500 47 = $625 20, credited to Surplus
$^{21}/_{36}$ of 1,500 47 = 875.27, credited to Life Insurance Expense

Note 4.—The apportionment between expired and deferred expense at the end of the third year is determined as follows:

The balance in the Insurance Expense account represents the net cost of insurance for 21 months, as follows	
For 9 months—deferred at beginning	$1,054 12
For 12 months—charged during the year	1,405 50
Total	$2,459 62
Less reduction for loan value, applicable ratably to the premiums for 21 months	875 27
Net cost for 21 months	$1,584 35
Cost for 12 months ($^{12}/_{21}$) written off	905 34
Cost for 9 months ($^{9}/_{21}$) deferred	$ 679 01

Note 5.—The amount charged off on December 31 of the fourth policy year is determined as follows:

Amount deferred on preceding January 1, representing the cost for the first 9 months of the calendar year		$679 01
Cost for the last 3 months of the calendar year		
Premium paid October 1, for next 12 months	$1,405 50	
Increase in loan value resulting from this payment	528 78	
Net cost for 12 months	$ 876 72	
Portion applicable to first 3 months of policy year = $\frac{1}{4}$ of $876 72		219.18
Total expense for the calendar year		$898 19

The amount deferred is $\frac{3}{4}$ of $876 72, or $657 54.

The expense for subsequent years should be computed in the same manner as for the fourth year. The peculiar complication in the third year results from the fact that the loan value was put on the books during that year.

Amortization of discount.—If the books are closed monthly or at a date other than the end of the policy year, strict accuracy should probably require the amortization of the discount which was deducted from end-of-year cash values to determine beginning-of-year loan values. In the preceding illustration, these discount deductions were:

	Third Year	Fourth Year
Cash surrender value—end of year	$1,590 50	$2,151 00
Loan value—beginning of year	1,500 47	2,029 25
Discount	$ 90 03	$ 121 75

The loan value on each December 31 will be greater than the loan value on the preceding October 1, because of the smaller discount which would be deducted. The computation of the loan value at any date by amortization of the discount for the expired portion of the policy year, is illustrated as follows:

Loan value, beginning of third policy year	$1,500 47
Loan value on following December 31.	
Add discount for three months—¼ of $90 03	22 51
Total	$1,522 98

The effect of such discount adjustments upon the loan values and insurance expense is shown by the following summary; variations from the preceding illustration are mentioned in the notes

	Insurance Expense	Cash Surrender Value	Profit and Loss	Surplus
First policy year				
Oct 1—Premium paid	$1,405 50			
Dec 31—Expense	351 38*		$ 351 38	
Deferred	$1,054 12			
Second policy year				
Oct 1—Premium paid	1,405 50			
Dec 31—Expense	1,405 50*		$1,405 50	
Deferred	$1,054 12			
Third policy year				
Oct 1—Premium paid	1,405 50			
Loan value	875 27*	$1,500 47		$625 20*
Dec. 31—Discount adjustment (Note 1) ..	22 51*	22 51		
Total loan value		$1,522 98		
Expense (Note 2).	882 83*		$ 882 83	
Deferred	$ 679 01			
Fourth policy year.				
Oct 1—Discount adjustment (Note 3)	67 52*	67 52		
Premium paid	1,405 50			
Loan value increase (Note 4) .	438 75*	438 75		
Total loan value .		$2,029 25		
Dec 31—Discount adjustment (Note 5)	30 44*	30 44		
Total loan value		$2,059 69		
Expense (Note 6)	822 74*		$ 822 74	
Deferred..	$ 725 06			

Notes

Note 1.—The discount adjustment on December 31 of the third policy year is one fourth of the total discount ($90 03) deducted on October 1 from the end-of-year cash value to determine the beginning-of-year loan value.

Note 2.—The charge to Profit and Loss on December 31 of the third policy year is the same as that in the preceding illustration

($905 34) minus the discount amortization ($22 51).

Note 3.—The discount adjustment ($67 52) on October 1 (end of the third policy year) is the total discount for the year ($90.03) minus the discount previously amortized ($22 51).

Note 4.—The increase in loan value ($438.75) is the same as that in the preceding illustration ($528 78) minus the two amortizations of the discount totaling $90.03

Note 5.—The discount amortization ($30 44) on December 31 of the fourth policy year is one fourth of the total discount ($121 75) for that year.

Note 6.—The amount charged to Profit and Loss on December 31 of the fourth policy year was computed as follows:

Amount deferred on preceding January 1, representing cost for the first 9 months of the calendar year		$679 01
Less amortization of discount on October 1, applicable thereto		67 52
Net cost for first 9 months of calendar year		$611 49
Cost for the last 3 months of the calendar year		
Premium paid October 1, for 12 months	$1,405 50	
Immediate increase in loan value resulting therefrom	438 75	
Remainder—applicable to 12 months	$ 966 75	
Portion applicable to 9 months after December 31—$9/12$ of $966 75—deferred	725 06	
Remainder applicable to first 3 months	$ 241 69	
Less discount amortization for 3 months	30 44	
Net cost for 3 months		211 25
Cost for 12 months		$822 74

Effect of dividends.—No consideration has been given to dividends in the preceding illustrations. If the dividends are applied in reduction of premiums, they simply reduce the charges to be made to the Life Insurance Expense account for premium payments. If they are left with the insurance company for the purpose of increasing the insurance, they produce increases in the cash surrender and loan values. Consequently they do not affect the principles and methods discussed on the preceding pages, they merely affect the amounts of premiums or asset values.

Balance sheet values.—The balance sheet should show the deferred premium and the cash or loan value of the insurance. Referring to the preceding illustration, the balance sheet on December 31 of the fourth policy year

should show deferred premiums of $725.06, and the loan value of $2,059.69.

The deferred premiums should be shown under the Deferred Charge caption, as a separate item or combined with unexpired premiums on other types of insurance. There is some difference of opinion concerning where the cash or loan value should be shown. It is often contended that the cash or loan value should be shown under the Current Asset caption because it is a source of immediately available funds. On the other hand, business life insurance is not customarily carried primarily for the purpose of providing available funds through surrender values. From the standpoint of theoretical definitions, the cash or loan value is a current asset if current assets are defined as cash and other assets which may be converted into cash without interfering with the operations of the business; it is not a current asset if current assets are defined as cash and other assets which will normally be converted into cash in the near future through the regular operations of the business. Bankers probably look with some disfavor upon the classification of cash and loan values as current assets, and prefer to see them classified under captions of Investments or Other Assets. A loan may be deducted from the policy value on the asset side; if a loan is shown as a current liability, the policy value should be shown as a current asset.

Settlements.—The collection of a policy by a corporation will be recorded by crediting Surplus with the entire amount received, if no Cash Surrender Value account appears on the books. If a Cash Surrender Value account has been set up, this account should be credited with a sufficient amount to close it, and the balance should be credited to Surplus.

The entries to be made on the books of a partnership to record the collection of a policy on the life of a partner will depend upon whether the partnership is the beneficiary or only the surviving partners are beneficiaries. If the partnership is the beneficiary, the credit will be divided among the Capital accounts (including the account of the deceased partner) in the profit and loss ratio. If only the surviving partners are beneficiaries, they alone will share in the proceeds and their accounts will be credited in their profit and loss ratio.

Workmen's Compensation and Employers' Liability Insurance

Nature of risk.—Under the common law, employees had great difficulty in recovering from employers for accidents suffered in the course of their employment, but most of the states now have workmen's compensation laws which provide that, for various specific accidents sustained during employment, the employee or his family shall be entitled to receive from his employer a certain fixed sum and/or a percentage of the wages which he would have earned during the period of disability. There is also a tendency to include occupational diseases among the hazards for which the employee shall be compensated. A specific statement of risks and compensations cannot be made, because of the diversity of laws.

Under workmen's compensation insurance, the insurance company assumes the employer's entire liability arising from the workmen's compensation law of the state. Employers' liability insurance gives the employer coverage against common-law suits brought by employees to obtain damages for personal injuries. The two related risks are usually covered by the same policy.

Premiums.—The premium is based upon the amount of the pay roll during the policy period. The previous accident experience of the insured and the safety measures and devices used in his plant are factors affecting the rates to be charged. All of the classes of employees of the insured may be covered by one policy; the rate per $100.00 of pay roll will be determined for each class separately on the basis of the hazard incident to the nature of the work.

At the beginning of the policy period, an advance premium is paid on the basis of the estimated pay roll. The actual pay roll is determined by an audit made by representatives of the insurance company, and the actual premium thereby determined. If the policy provides for an annual pay roll audit, the advance premium will cover the estimated pay roll for the year, at the end of the year, the insured will pay an additional premium or receive a refund, depending upon whether the advance premium was less or more than the actual premium. If the policy is for a year, but if the audit is made more frequently (say quarterly), the advance pre-

mium will cover the estimated pay roll for one quarter; at the end of the first, second, and third quarters, a payment will be made for the actual premium for the expired quarter; at the end of the fourth quarter, an additional premium payment or refund will be made, based on the difference between the original advance premium and the actual premium for the fourth quarter. The policy usually provides that a certain minimum portion of the advance premium shall not be refundable to the insured.

Since the rate applicable to each class of employees and the total estimated pay roll therefor are stated in the policy, the pay roll records must be kept separately for each class or in such a manner that a summary may be prepared by classifications. Computations of earned premiums are made separately for each class.

Accounting.—The advance premium should be charged to Prepaid Workmen's Compensation Insurance, and this account should be written off to Workmen's Compensation Insurance expense accounts by periodical entries based on the actual pay rolls. To illustrate the procedure, assume that the non-refundable advance premium is \$175.00, and that the total advance premium is \$206.80, computed thus:

Classification	Estimated Payroll for the Year	Rate per \$100 00	Advance Premium
Factory	\$20,000 00	\$ 80	\$160 00
Shipping	4,000 00	42	16 80
Office	10,000 00	06	6 00
Salesmen	15,000 00	16	24 00
Total			\$206 80

The entry for the advance premium payment would be:

Prepaid Workmen's Compensation Insurance	206 80	
Cash		206 80

A summary may be kept to show the earned premium based on the pay roll for each pay roll period, as follows.

		July		August	
Classification	Rate	Pay Roll	Premium	Pay Roll	Premium
Factory	. 80	\$2,000 00	\$16 00	\$1,960 00	\$15 68
Shipping	42	350 00	1 47	365 00	1 53
Office	.06	900 00	54	1,015 00	61
Salesmen	16	1,000 00	1 60	1,100 00	1 76
Total		\$4,250 00	\$19 61	\$4,440 00	\$19 58

The entry for the premium earned in July might be:

Workmen's Compensation Insurance	19 61	
Prepaid Workmen's Compensation Insurance		19 61

Or the charge might be classified, as follows:

Workmen's Compensation Insurance—Factory	16 00	
Workmen's Compensation Insurance—Shipping	1 47	
Workmen's Compensation Insurance—Office	54	
Workmen's Compensation Insurance—Salesmen	1 60	
Prepaid Workmen's Compensation Insurance		19 61

To illustrate the final premium settlement, let us assume that the total premiums payable, based on actual pay rolls for the year, were $221.30. The Prepaid Workmen's Compensation Insurance account would have been charged with $206.80 (the prepaid premium) and credited with $221.30 (the premium based on actual pay rolls) and would therefore have a credit balance of $14.50, representing the liability for additional premium. If the premiums based on actual pay rolls were $195.00, the Prepaid Workmen's Compensation Insurance account would have a debit balance of $11.80, representing the refund receivable from the insurance company. If the actual premiums were only $160.00, the account would have a debit balance of $46.80, but the recoverable refund would be only $31 80, the $206.80 advance premium minus the $175.00 minimum premium.

Miscellaneous Types of Insurance

Use and occupancy.—This type of insurance indemnifies the insured for loss of net profits during the period of plant shutdown, for fixed charges which continue during that period, for extraordinary expenses incurred to hasten the replacement of machinery, for extra compensation for overtime, for extra cost of having product manufactured elsewhere while the plant is inoperative, and for other similar costs.

The forms of use and occupancy insurance available are based on the nature of the earning power of the insured, for example:

Straight per diem form, which is suitable if the earning power is distributed evenly throughout the year. The recovery per day is limited to 1/300 of the full amount of the policy.

Fluctuating or seasonal per diem form, which is suitable if periods of fluctuation in operations can be predetermined. The daily limit of recovery is determined by the fluctuating character of the business.

Use and occupancy insurance may be obtained in connection with fire, riot and civil commotion, sprinkler leakage, water damage, boiler explosion, tornado, and other types of insurance.

If one manufacturer is dependent upon another for a continuous and uninterrupted supply of materials or parts, he can obtain contingent use and occupancy insurance against the loss which would be caused by the supplier's inability to furnish goods.

Explosion; riot and civil commotion.—This type of insurance protects the insured against loss or damage due to riot, insurrection, and explosion resulting from the foregoing or other causes, whether originating on the insured's premises or elsewhere. It does not cover damages done at the direction of governmental or civil authorities, explosions coverable by boiler explosion insurance, fires resulting from such explosions, or loss or damage caused by the military or naval forces of foreign enemies.

Sprinkler leakage.—Such policies insure against loss or damage due to sprinkler leakage, but do not cover loss or damage to the sprinkler system itself. Losses of books of account, money, notes, evidences of indebtedness, and patterns are excluded or the underwriter's liability therefor is greatly limited.

Boiler explosion.—The coverage under policies of this type includes loss of, or damage to, property of the insured, or property of others for which the insured is liable, caused directly by the accident; personal injuries caused by the accident; and items of cost for temporary repairs. The coverage does not include explosions caused by fire, or fire resulting from any cause.

Fidelity bonds.—Fidelity bonds, under which a surety company obligates itself to reimburse the insured for losses resulting from the dishonesty of employees, are issued in the

following forms.

Individual bonds, covering one or a few employees.
Position schedule bonds, covering anyone holding any of the positions scheduled.
Name schedule bonds, covering named employees occupying named positions

The insured must notify the company promptly upon the discovery of a loss, and time limits are placed upon the filing of claims and the filing of suits against the insurer for losses suffered during the policy period.

Plate glass.—This insurance covers loss due to breakage of glass, and usually the cost of lettering and ornamentation on the glass. It does not cover damage caused by fire, by earthquake, or by workmen engaged in construction or repairs.

Marine insurance.—This type of protection is indispensable for all shippers engaged in foreign commerce. Protection may be obtained under:

A special policy, covering one shipment only.
An open policy, covering all shipments made during a specified period, a premium being charged for each shipment
A blanket policy, which is similar to an open policy, except that an estimated annual premium is payable in advance.

Public liability and property damage.—Such policies protect the insured against losses resulting from liability for injury to another, or against damage to the property of another, due to negligence of the insured or of his employees or agents. Public liability insurance may be written to cover various types of hazard, such as a contractor's liability for injuries to persons passing a building under construction, a building owner's liability for injury to persons riding in an elevator; an automobile owner's liability for injury to others, physicians' and dentists' liability for malpractice; and so forth. Property damage insurance may be obtained by indorsement to public liability policies.

Public liability policies usually provide that the insurance company shall reimburse the insured for the cost of first aid, defend the insured against damage suits, pay all expenses incurred in connection therewith, and satisfy judgments rendered against the insured—all subject to the limits of the policy. A limit is placed upon the amount to be paid to any one person, or to two or more persons as the result of one accident. Damages resulting from liabilities imposed by workmen's compensation laws are excluded.

Profit insurance.—This type of insurance indemnifies for the profit which would have been made from the sale of finished goods destroyed. For instance, ordinary fire insurance will protect the insured to the extent of the actual cash value of the goods destroyed; profit insurance will further protect him to the extent of the profit which could have been made by the sale of the goods.

Under certain circumstances and on payment of an additional premium, a profit insurance clause may be included in other insurance policies, such as fire, riot and civil commotion, sprinkler leakage, and water damage. The reputation of the applicant may be fully investigated before such insurance is written.

Insurance Register

Form and purpose.—A register of insurance policies is desirable for two purposes: first, to show the policies in force, and the amount of each class of coverage; and second, to show the distribution of the insurance premium expense by months or years. Insurance registers are obtainable with various rulings. The following information should be shown:

Policy number.
Date of policy.
Date of expiration.
Name of insurance company.
Nature of coverage.
Amount of insurance.
Total premium.
Distribution of premium expense by periods.

The nature of the coverage and the amount of the insurance may be shown as follows.

Coverage	Insured Amount
Fire—Building	$150,000 00
Fire—Contents	60,000 00
Elevator	50,000 00
Steam Boiler	50,000 00

If coverage for one risk is carried in several policies, it may be desirable to provide columns in the register so that the coverages may be shown as follows:

Coverage					
Fire Building	Fire Contents	Elevator	Steam Boiler	Etc	Etc
150,000					
	60,000				
		50,000			
			50,000		
90,000					
	35,000				

The columns to be provided for distribution of premium expense by periods will depend upon whether it is desired to show distributions by years or by months. If distribution by years is sufficient, four or five year columns will suffice. If distribution is desired by months, a column must be provided for each month of the year, for the unexpired premiums at the beginning of the year and for the unexpired premiums at the end of the year, thus.

Unexpired	Monthly Expiration					Unexpired
Jan 1	Jan	Feb	Mar	Apr	Dec.	Dec 31

The totals of the monthly expiration columns will show the amounts to be charged monthly to Insurance Expense and credited to Unexpired Insurance. At the end of each year, a new page must be opened, and all policies in force forwarded to it.

CHAPTER 38

THE STATEMENT OF AFFAIRS

Liquidation accounting.—Four chapters are devoted to the statements and accounts of businesses in financial difficulties. This chapter describes a statement showing the estimated payments which can be made to various classes of creditors; Chapter 39 deals with the accounting under a receivership; Chapters 40 and 41 describe the statements which reflect the results of realization and liquidation.

Insolvency.—The words *insolvent* and *bankrupt* are often used synonymously, but they are not synonymous. Two definitions must be given for the word insolvent.

First, the popular meaning. A person who is not able to pay his debts as they mature in the regular order of business, is said to be insolvent. He may have assets greatly in excess of his liabilities, but these assets may be tied up in such a manner that they cannot be realized promptly enough to meet current liabilities For example, a merchant may have an investment in store property, merchandise, and accounts receivable greatly exceeding, at a fair valuation, the amount of his liabilities, but the merchandise turns slowly, the accounts receivable are good, but long credit terms have been given and the accounts are not due; and the store property is valuable, but it has no ready market. The merchant cannot pay his debts as they mature, and in the popular meaning of the term he is insolvent. Under the National Bankruptcy Act which was in force between 1867 and 1878, insolvency was thus defined as the inability to meet one's debts in the regular course of trade, regardless of the ratio of the liabilities to the assets at a fair value.

Second, the definition of insolvency in the National Bankruptcy Act now in force (the Act of 1898, as subsequently amended): "A person shall be deemed insolvent within the provisions of this Act whenever the aggregate

of his property, exclusive of any property which he may have conveyed, transferred, concealed, or removed, or permitted to be concealed or removed, with intent to defraud, hinder or delay his creditors, shall not, at a fair valuation, be sufficient in amount to pay his debts."

Bankruptcy.—A person may be insolvent without being bankrupt. According to the definition in the National Bankruptcy Act, a "bankrupt shall include a person against whom an involuntary petition or an application to set a composition aside or to revoke a discharge has been filed, or who has filed a voluntary petition, or who has been adjudged a bankrupt."

Bankruptcy may be either voluntary or involuntary. The bankruptcy law provides that any person, except a municipal, railroad, insurance, or banking corporation, or a building and loan association, shall be entitled to the benefits of the Act as a voluntary bankrupt. The law also provides that any natural person, except a wage earner (defined as an individual who works for wages, salary, or hire, at a rate of compensation not exceeding one thousand five hundred dollars per year) or a person engaged chiefly in farming or the tillage of the soil, any unincorporated company, and any moneyed, business, or commercial corporation (except a municipal, railroad, insurance, or banking corporation, or a building and loan association) owing debts to the amount of one thousand dollars or over, may be adjudged an involuntary bankrupt.

The bankruptcy law provides for the appointment of two officers: a referee and a trustee. The referee is appointed by, and is clothed with certain powers of, the court for the purpose of relieving the court of detailed supervision of the activities of the trustee. Several bankruptcy cases may be assigned to one referee The trustee is appointed by the creditors, or by the court if the creditors fail to make an appointment. The trustee liquidates the bankrupt estate for the benefit of the creditors. The law provides for the appointment of one or three trustees in each case.

Acts of bankruptcy.—Creditors cannot force a person into involuntary bankruptcy unless he has committed one

of the "acts of bankruptcy," which are: "having (1) conveyed, transferred, concealed, or removed, or permitted to be concealed or removed, any part of his property with intent to hinder, delay, or defraud his creditors, or any of them; or (2) transferred, while insolvent, any portion of his property to one or more of his creditors with intent to prefer such creditors over his other creditors; or (3) suffered or permitted, while insolvent, any creditor to obtain a preference through legal proceedings, and not having at least five days before a sale or other disposition of any property affected by such preference, vacated or discharged such preference; or (4) suffered, or permitted, while insolvent, any creditor to obtain through legal proceedings any levy, attachment, judgment, or other lien, and not having vacated or discharged the same within thirty days from the date such levy, attachment, judgment, or other lien was obtained; or (5) made a general assignment for the benefit of his creditors; or, while insolvent, a receiver or a trustee has been appointed, or put in charge of his property, or (6) admitted in writing his inability to pay his debts and his willingness to be adjudged a bankrupt on that ground."

"A petition may be filed against a person who is insolvent and who has committed an act of bankruptcy within four months after the commission of such act."

Compositions and extensions.—By the supplementary act of March 3, 1933, courts of bankruptcy are given jurisdiction in certain proceedings for the relief of debtors. Such proceedings may result in compositions (pro-rata settlements) with creditors, or in extensions of time for the payment of debts.

Voluntary assignment.—An insolvent debtor may make an assignment of his assets to an assignee, for the benefit of his creditors. It is the duty of the assignee to realize the assets and to make a pro-rata settlement with the creditors. The debtor is not relieved from liability for unpaid balances unless there has been a composition with the creditors. A composition is an arrangement between the debtor and all of his creditors "whereby each creditor agrees to receive, either in cash or in obligations, a certain proportion of the debt due him," and the debtor is thereby released from

liability for the unpaid balances.

A debtor who has made an assignment may be forced into bankruptcy, but it is usually held that no creditor can be a party to a petition in bankruptcy if he has consented to a liquidation by voluntary assignment.

Receivership in equity.—A receiver in equity is an appointee of a court, who acts under the authority of the court in the management of an insolvent business. The receiver usually operates the business long enough to pay off the creditors, whereupon he returns it to its proprietors. The purpose of the receivership may be a reorganization resulting in a change in the stock and bond issues. If the receiver finds it impossible to operate the business successfully, he may, with the consent of the court, proceed to liquidate it.

Creditors' representatives.—Not infrequently, when a business becomes financially embarrassed, operations are continued under the direction of a committee of the creditors.

Statement of affairs.—The statement of affairs is sometimes used to reflect the financial condition of an insolvent business. Both the balance sheet and the statement of affairs are statements of financial condition. The differences between the two statements are indicated below:

(1) The balance sheet is prepared from the viewpoint of a going concern; the statement of affairs is prepared from the viewpoint of liquidation.

(2) In the balance sheet, the assets and liabilities are classified on a going-concern basis, as fixed, current, deferred, and so forth; in the statement of affairs, the liabilities are classified as prior, fully secured, partially secured, and unsecured, and the assets are classified to indicate those which have been pledged with creditors and those which are free.

(3) In the balance sheet, the assets are stated at going-concern values; in the statement of affairs, they are stated at both going-concern values and at estimated realizable values.

Illustration.—The statement of affairs on page 128 is based on the following balance sheet and supplementary information:

THE SMITH COMPANY

Balance Sheet—June 30, 1933

Assets		Liabilities	
Cash	$ 300 00	Accrued Wages	$ 250 00
Accounts Receivable	9,000 00	Accounts Payable	25,000 00
Merchandise	18,000 00	Notes Payable	4,000 00
Bonds of X Company	3,000 00	Mortgage Payable	15,000 00
Land and Buildings	25,000 00	Capital Stock	10,000 00
		Surplus	1,050 00
	$55,300 00		$55,300 00

The accounts receivable have not been pledged with any of the creditors; their value is estimated as follows:

	Gross Value	Estimated Realizable Value
Good	$4,000 00	$4,000 00
Doubtful.	3,000 00	1,500 00
Bad	2,000 00	—

The merchandise is not pledged, and its estimated realizable value is $13,500 00.

The bonds of X Company, carried at $3,000.00, are worth $3,200.00; they have been pledged as security to the notes payable of $4,000 00, which are therefore only partially secured.

The land and buildings, which are thought to be worth $18,000 00, serve as security to the $15,000.00 mortgage, which is therefore fully secured.

In the statement of affairs on page 128, the balance sheet values are shown in the Book Value columns The Expected to Realize column shows the amounts which the receiver expects to obtain from these assets, and the Expected to Rank column shows the amounts of unsecured liabilities. The treatment of the various assets and liabilities is discussed in the following sections

Liabilities having priority.—The National Bankruptcy Act provides·

"(a) The court shall order the trustee to pay all taxes legally due and owing by the bankrupt to the United States,

THE SMITH COMPANY

Statement of Affairs—June 30, 1933

Assets

Book Value			Expected to Realize
	Assets Pledged with Fully Secured Creditors		
$25,000.00	Land and Buildings.		
	Estimated Value.	$18,000 00	
	Less Mortgage Payable—contra	15,000 00	$ 3,000.00
	Assets Pledged with Partially Secured Creditors		
3,000 00	Bonds of *X* Company—deducted contra		
	Estimated value	$ 3,200 00	
	Free Assets:		
300 00	Cash		300 00
9,000 00	Accounts Receivable		
	$4,000 00 Good.		4,000 00
	3,000 00 Doubtful		1,500 00
	2,000 00 Bad		
	$9,000 00		
18,000 00	Merchandise		13,500 00
	Total Free Assets		$22,300 00
	Deduct Liabilities Having Priority, per contra.		
	Accrued Wages		250 00
	Net Free Assets		$22,050 00
	Deficiency to Unsecured Creditors		3,750 00
$55,300 00			$25,800 00

Liabilities

Book Value			Expected to Rank
	Liabilities Having Priority:		
$ 250 00	Accrued Wages—deducted contra		
	Fully Secured Liabilities		
15,000 00	Mortgage Payable—deducted contra		
	Partially Secured Liabilities:		
4,000 00	Notes Payable	$4,000 00	
	Deduct Bonds of *X* Co	3,200 00	$ 800 00
	Unsecured Liabilities.		
25,000 00	Accounts Payable		25,000 00
	Capital		
10,000 00	Capital Stock		
1,050 00	Surplus		
$55,300 00			$25,800 00

State, county, district, or municipality, in the order or priority as set forth in paragraph (b) hereof. . . . .

"(b) The debts to have priority, in advance of the payment of dividends to creditors, and to be paid in full out of bankrupt estates, and the order of payment shall be (1) the actual and necessary cost of preserving the estate subsequent to filing the petition; (2) the filing fees paid by creditors in involuntary cases, and where property of the bankrupt, transferred or concealed by him either before or after the filing of the petition, shall have been recovered for the benefit of the estate of the bankrupt by the efforts and at the expense of one or more creditors, the reasonable expense of such recovery; (3) the cost of administration, including the fees and mileage payable to witnesses as now or hereafter provided by the laws of the United States, and one reasonable attorney's fee, for the professional services actually rendered, irrespective of the number of attorneys employed, to the petitioning creditors in involuntary cases while performing the duties herein prescribed, and to the bankrupt in voluntary and involuntary cases as the court may allow; (4) where the confirmation of composition terms has been refused or set aside upon the objection and through the efforts and at the expense of one or more creditors, in the discretion of the court, the reasonable expenses of such creditors in opposing such composition, (5) wages due to workmen, clerks, traveling or city salesmen, or servants, which have been earned within three months before the date of the commencement of the proceeding, not to exceed $600.00 to each claimant; (6) taxes payable under paragraph (a) hereof; and (7) debts owing to any person who by the laws of the States or the United States is entitled to priority: Provided, That the term person as used in this section shall include corporations, the United States and the several States and Territories of the United States."

In some states rents are given priority by state law, and in such states liabilities for rent are entitled to priority under clause (7).

Liabilities having priority have usually been shown in the statement of affairs under the caption of Preferred Liabilities. However, "preference" has a different meaning under the

bankruptcy law, which provides that a debtor "shall be deemed to have given a preference if, being insolvent, he has, within four months before the filing of the petition, or after the filing of the petition and before the adjudication, procured or suffered a judgment to be entered against himself in favor of any person, or made a transfer of any of his property, and the effect of the enforcement of such judgment or transfer will be to enable any one of his creditors to obtain a greater percentage of his debt than any other of such creditors of the same class."

For purposes of precision in terminology, the author is taking the liberty of discontinuing the customary caption Preferred Liabilities in the statement of affairs and substituting the caption Liabilities Having Priority.

It will be noted that, in the statement of affairs, such liabilities are not extended to the Expected to Rank column, but are deducted from the total free assets in the Expected to Realize column, to indicate that they are a first claim against the free assets and that they must be settled in full before any assets are available for the payment of unsecured liabilities.

Fully secured liabilities and pledged assets.—A fully secured liability is a debt secured by pledged assets having a realizable value equal to or greater than the amount of the debt. Fully secured creditors realize on the pledged assets, deduct the amount of their claims, and pay any excess to the receiver or trustee; in the statement of affairs on page 128, the \$15,000.00 fully secured mortgage and the \$18,000.00 of pledged assets are shown as follows:

On the asset side:

The estimated value of the mortgaged land and buildings, \$18,000.00, is entered at the left of the Expected to Realize column, the amount of the mortgage is deducted, and the \$3,000.00 excess of the security over the liability is entered in the Expected to Realize column, to show the net amount which the trustee expects to obtain.

On the liability side:

The notation "deducted contra" and the omission of the

amount from the Expected to Rank column indicate that the mortgage will be paid from the proceeds of the pledged assets and not from the funds which are to come into the trustee's hands.

Partially secured liabilities and pledged assets.—A partially secured liability is a debt secured by assets having a realizable value less than the amount of the debt. Partially secured creditors realize on the pledged assets, apply the proceeds in reduction of their claims, and look to the trustee for payment of the unsecured balance. Therefore, as illustrated by the statement of affairs on page 128,

On the liability side.

The estimated value of the pledged bonds ($3,200.00) is deducted from the amount of the liability ($4,000.00), and the excess or unsecured portion of the liability ($800.00) is extended to the Expected to Rank column, as a general claim against the free assets.

On the asset side:

The notation "deducted contra" and the omission of the estimated value from the Expected to Realize column indicate that the trustee will obtain no funds from the disposal of the bonds

Unsecured liabilities and free assets.—All unsecured liabilities are entered in the Expected to Rank column, and the realizable values of all free assets are entered in the Expected to Realize column.

Capital.—The amounts of the capital stock and surplus are entered in the Book Value column on the liability side of the statement of affairs, to bring the two Book Value columns into balance and thus to indicate that no assets or liabilities shown by the balance sheet have been omitted from the statement of affairs.

Net free assets and deficiency to unsecured creditors.—The $22,300.00 total of the Expected to Realize column is the amount of funds which the trustee expects will come into his possession. The liabilities having priority are deducted from this total to indicate that they are a first

claim against the free assets, and to determine the $22,050.00 remainder, or net free assets, which it is estimated will be available for the payment of unsecured liabilities. The difference between the net free assets and the unsecured liabilities (shown by the total of the Expected to Rank column) is the deficiency to unsecured creditors.

The Deficiency account.—The statement of affairs should be accompanied by a statement called a Deficiency account showing the estimated loss or gain on the realization of the assets. This account, or statement, shows why it will be impossible to pay the unsecured creditors in full. The estimated losses and gains appear in the Deficiency account as follows:

THE SMITH COMPANY
Deficiency Account—June 30, 1933

Estimated Loss on		Estimated Gain on:	
Accounts Receivable	$3,500 00	Bonds of *X* Company	$200 00
Merchandise	4,500 00		
Land and Buildings	7,000 00		

The balance of this account now shows a loss of $14,800.00. The account is closed by entering on the credit side:

(1) The Capital Stock and Surplus of the corporation, thus indicating the loss to be borne by the stockholders; and

(2) The Deficiency to Unsecured Creditors, per the statement of affairs, thus indicating the probable loss to be borne by the creditors.

THE SMITH COMPANY
Deficiency Account—June 30, 1933

Estimated Loss on:		Estimated Gain on:	
Accounts Receivable	$ 3,500 00	Bonds of *X* Company	$ 200 00
Merchandise	4,500 00	Capital Stock	10,000 00
Land and Buildings	7,000 00	Surplus	1,050 00
		Deficiency to Creditors	3,750 00
	$15,000 00		$15,000 00

Illustration of special points.—The statement of affairs and the Deficiency account on pages 134 to 136 illustrate the treatment of a number of special points discussed in the following sections.

Reserves.—The treatment of reserves depends upon their nature. For purposes of explanation and illustration, reserves may be classified as follows

(1) Valuation reserves, such as reserves for depreciation and for bad debts.

Such reserves are usually deducted from the gross book values of the assets, and the net book values are entered in the Book Value column on the asset side of the statement of affairs. This treatment is illustrated by the deduction of the reserves for depreciation of buildings and machinery. The Deficiency account shows, as a loss, the difference between the net book value and the estimated realizable value.

In some cases one reserve may be set up against two or more assets. For instance, in the illustrative statement, there is one reserve for losses on both accounts and notes receivable. Since this reserve cannot be apportioned between the two assets, it cannot be deducted on the asset side of the statement, and is therefore shown under the Reserve caption on the liability side of the statement. In the Deficiency account, the reserve is deducted from the gross loss on the accounts and notes

(2) Reserves for accrued liabilities.

Such reserves should be classified under the Prior, Fully Secured, Partially Secured, or Unsecured Liabilities caption if any real liability exists. If there is no liability, the reserve may be shown under the Reserve caption, with no amount extended to the Expected to Rank column. In the illustration, a reserve was provided for possible additional Federal income taxes of prior years; as it is expected that the tax will have to be paid, the item is classified as a liability having priority.

(3) Contingent liabilities.

The three following contingent liabilities appear in the statement of affairs on page 134.

THE LUCAS MANUFACTURING COMPANY

Statement of Affairs—August 31, 1933

Assets

Book Value				Expected to Realize
	Assets Pledged with Fully Secured Creditors			
$ 5,000	Land—Estimated Value		$ 5,350	
21,000	Buildings—Estimated Value		16,000	
	$27,500 Cost			
	6,500 Reserve for Depreciation			
	$21,000 Net Book Value			
12,500	Sinking Fund		12,250	
	Total Security for Bonds Payable		$33,600	
	Deduct: Bonds Payable	$25,000		
	Accrued Interest	500	25,500	$ 8,100
	Assets Pledged with Partially Secured Creditors:			
5,000	Bonds of Fairview Company—Estimated Value		$ 4,850	
100	Accrued Interest on Bonds		100	
2,350	Finished Goods		1,200	
	Total Security for $10,000 of Notes Payable—deducted contra		$ 6,150	
	Free Assets			
495	Cash		$ 495	
	Less Worthless Checks Held		210	285
32,375	Accounts Receivable			19,800
1,200	Notes Receivable			800

Liabilities

Book Value			Expected to Rank
	Liabilities Having Priority		
$ 225	Accrued Taxes—deducted contra		
425	Reserve for Federal Income Tax—deducted contra		
	Fully Secured Liabilities		
25,000	Bonds Payable—deducted contra		
500	Accrued Bond Interest—deducted contra		
	Partially Secured Liabilities		
10,000	Notes Payable	$10,000	
120	Accrued Interest on Notes Payable	120	
	Total	$10,120	
	Deduct Security—detailed per contra	6,150	$ 3,970
	Unsecured Liabilities:		
25,000	Notes Payable		25,000
355	Accrued Interest on Notes Payable		355
32,350	Accounts Payable		32,350
	Contingent Liabilities		
400	Notes Receivable Discounted		400
3,000	Reserve for Damage Suit		
	Possible Liability for Non-Delivery of Merchandise		1,000

18	Accrued Interest on Notes Receivable			18
5,900	Goods in Process			
	Estimated Value When Completed		$ 6,000	
	Less Cost to Complete			
	Raw Materials Worth	$500		
	Other Expenditures	200	700	5,300
7,000	Raw Materials			
	$1,000 to be Used in Finishing Goods in Process			500
	$6,000 to be Sold . . .			3,000
5,000	Bonds of Fairview Company .			4,850
100	Accrued Interest on Bonds .			100
23,700	Machinery—Estimated Value			18,500
	$31,000 Appraised Value			
	7,300 Reserve for Depreciation			
	$23,700 Net Book Value			
10,000	Goodwill—No Value			
125	Unexpired Insurance			
500	Discount on Stock . .			300
	Total Free Assets.			$61,553
	Deduct Liabilities Having Priority—per contra			650
	Net Free Assets . .			$60,903
	Deficiency to Creditors . . .			2,172
$132,363				$63,075

	Reserves:	
5,000	Unrealized Profit on Appraisal of Machinery	
1,500	Reserve for Doubtful Receivables	
	Capital	
25,000	Capital Stock	
12,500	Sinking Fund Reserve	
9,012*	Deficit (in red)	
$132,363		$63,075

THE LUCAS MANUFACTURING COMPANY

Deficiency Account—August 31, 1933

Deficit from Operations		$ 9,012 00	Estimated Gain on Land	$ 350 00
Estimated Loss on			Reserve for Damage Suit—not required	3,000 00
Buildings		5,000 00	Capital Stock	25,000 00
Sinking Fund		250 00	Sinking Fund Reserve.	12,500 00
Bonds of Fairview Company		300 00	Deficiency to Creditors	2,172 00
Finished Goods.		1,150 00		
Cash		210 00		
Receivables:				
Accounts Receivable	$12,575 00			
Notes Receivable	400 00			
Total.	$12,975 00			
Less Reserve for Losses	1,500 00	11,475 00		
Goods in Process		600 00		
Raw Materials		3,500 00		
Machinery:				
Net Book Value.	$23,700 00			
Less Unrealized Profit on Appraisal	5,000 00			
Cost Less Depreciation	$18,700 00			
Less Estimated Realizable Value	18,500 00	200 00		
Goodwill		10,000 00		
Unexpired Insurance		125 00		
Discount on Stock		200 00		
Possible Liability for Non-Delivery of Merchandise		1,000 00		
		$43,022 00		$43,022 00

The company was contingently liable in the amount of $400.00 on notes receivable discounted. The discounted notes will probably have to be paid by the indorser, and the $400.00 is therefore extended to the Expected to Rank column. This $400.00 is also, of course, included in the $1,200 00 debit balance of the Notes Receivable account. Since it is expected that the remaining notes receivable will be collectible, $800.00 is extended to the Expected to Realize column on the asset side.

The company had set up a $3,000 00 reserve for possible payments to be made as damages under a pending suit. A favorable issue of the suit now appears probable, and therefore no liability is extended to the Expected to Rank column.

On the other hand, the company is in default on a contract for the delivery of goods and will probably be required to pay $1,000 00 in settlement of damages. Although no reserve was set up, the item is shown under the Contingent Liabilities caption, with $1,000.00 extended to the Expected to Rank column.

(4) Unrealized profit reserves

When the company's machinery was appraised, a reserve was set up for the unrealized profit of $5,000.00. This reserve is shown under the Reserves caption in the statement of affairs. It might have been deducted from the book value of the property on the asset side, thus:

$18,700 00		Machinery
	$31,000.00	Appraised Value
	7,300 00	Reserve for Depreciation
	$23,700 00	Net Book Value
	5,000 00	Unrealized Profit per Appraisal
	$18,700 00	Cost Less Depreciation

(5) Surplus reserves.

The illustrative statement of affairs contains one surplus reserve—the Sinking Fund Reserve. As it is a part of the net worth, it is classified under the Capital caption.

Accrued interest.—Accrued interest should appear in the statement of affairs immediately after the asset or liability on which the interest has accrued. If interest has accrued:

On an asset pledged as security, the interest as well as the principal should be shown as pledged. As an illustration, note the treatment of the accrued interest on the Fairview Company bonds under the caption, Assets Pledged with Partially Secured Creditors.

On a fully secured liability, the interest as well as the principal of the liability should be deducted from the security. As an illustration, note (under the caption, Assets Pledged with Fully Secured Creditors) the deduction of the bond principal and interest from the total security.

On a partially secured liability, the security should be deducted from the sum of the liability on principal and interest. For an illustration, refer to the data shown under the Partially Secured Liabilities caption.

Liabilities secured by more than one asset.—The statement of affairs on page 134 contains two illustrations of liabilities secured by more than one asset. Under the captions:

Assets Pledged with Fully Secured Creditors:

The company's land, buildings, and sinking fund are shown as security for the bonds payable.

Assets Pledged with Partially Secured Creditors:

Half of the company's Fairview bonds, the accrued interest thereon, and the finished goods are shown as security for the notes payable

Unexpired insurance.—There is a difference of opinion among accountants as to whether the unexpired premiums on insurance policies should appear in the Expected to Realize column. While it is true that the unexpired premiums have a certain cash value at the time of preparing the statement of affairs, it is doubtful whether this value should be shown as a realizable asset. It cannot be realized without canceling the policies, and the policies cannot be safely canceled until the assets insured have been disposed of.

As it is not certain when the policies can be canceled, there is no way of knowing what, if anything, can be realized from the policies, and it therefore seems more conservative to give them no realizable value. The total unexpired premium can properly be shown in the Expected to Realize column of a statement prepared in support of a request for a loan (see page 142), because of its going-concern value.

Assets partly pledged and partly free.—The statement on pages 134 and 135 shows that $5,000.00 par value of the Fairview Company bonds are pledged with partially secured creditors, and that the other $5,000.00 par value are free and unpledged. In a balance sheet the $10,000 00 total would probably be shown under one caption, but in a statement of affairs the pledged and unpledged status should be clearly indicated.

Deficit.—If a deficit appears in the balance sheet, it should not be shown on the asset side of the statement of affairs but should be deducted from the capital stock on the liability side, in the manner illustrated on page 135.

Stock discount.—When a Stock Discount account appears on the books of a corporation, the creditors have a right to the payment of the discount, or as much thereof as is necessary to pay the liabilities in full. If it is possible to make collections from the stockholders, a value should be carried to the Expected to Realize column. The Expected to Realize column may show only the amount necessary to collect in order to avoid a deficiency to creditors. For instance, if there is a $10,000.00 Stock Discount account, and if, on the basis of the estimated realizable values of the assets, it appears necessary to collect $7,000.00 of the discount, only $7,000.00 need be entered in the Expected to Realize column. However, while it is true that no more will be collected from the stockholders than is necessary to pay the creditors in full, it seems desirable to show the full amount that can be collected, because of the possibility that the realizable values of the assets may have been overestimated. If this should prove to be true, there would be a corresponding increase in the amount to be collected from the stockholders,

and it seems desirable to have the statement of affairs show the maximum amount which could be collected. The facts may therefore be shown as follows:

Book Value		Expected to Realize
5,000 00	Discount on Stock	
	Estimated Amount Collectible 4,000 00	
	Estimated Amount Required to Pay Creditors in Full	2,000 00

Additional costs before realization.—It is sometimes necessary to make additional expenditures on assets before they can be realized to the best advantage. As an example, the statement of affairs on page 135 shows, under the Goods in Process caption, that this inventory, when completed, will probably realize \$6,000 00 but that raw materials worth \$500.00 and other expenditures of \$200.00 will be required for their completion. The proposed use, in the completion of goods in process, of raw materials having a realizable value of \$500 00, is also shown under the Raw Materials caption.

Accounts and notes payable.—There is a tendency to assume that notes payable rank ahead of accounts payable as liabilities. This is a false assumption. Notes do not rank ahead of accounts unless the holders of notes have some security. On the other hand, accounts may rank ahead of notes if the accounts are secured and the notes are not.

Loss to partners.—If the business is operated by a partnership, the deficiency to creditors may be brought down in the statement of affairs as shown in the illustration on page 141 because the creditors can collect from the partners' private resources.

This form of statement may be used to advantage when one of the partners is insolvent and it is desired to show his personal creditors what equity he will have in the assets of the partnership after liquidation. This statement shows that Jones will have an equity of \$600.00 which his creditors can attach, whereas Smith will have no equity for his creditors to attach.

Statement for credit purposes.—A statement of affairs may be submitted to a bank or other prospective creditor in

	Deficiency to Unsecured Creditors—down	3,750 00	
		$25,800 00	
	Estimated Loss to Partners	$14,800 00	
$55,300 00		$14,800 00	$55,300 00

Division of Loss, and Resulting Capitals

	Jones	Smith
Capitals per books	$8,000 00	$3,050 00
Loss ..	7,400 00	7,400 00
Balance	$ 600 00	$4,350 00*

* Debit balance

Total Unsecured Liabilities .	$25,800 00
Deficiency to Creditors—down .	$ 3,750 00
Capital	
Jones, Capital	8,000 00
Smith. Capital. . . .	3,050 00
	$14,800 00

THE SMITH COMPANY

Statement of Affairs—June 30, 1933

Assets

Book Value			Expected to Realize
	Assets Pledged with Fully Secured Creditors		
$25,000 00	Land and Buildings		
	Estimated Value	$26,500 00	
	Less Mortgage Payable—contra	15,000 00	$11,500 00
	Assets Pledged with Partially Secured Creditors		
3,000 00	Bonds of *X* Company—deducted contra		
	Estimated Value	$ 3,200 00	
	Free Assets		
300 00	Cash		300 00
9,000 00	Accounts Receivable		
	$7,000 00 Good		7,000 00
	2,000 00 Doubtful		1,500 00
	$9,000 00		
18,000 00	Merchandise		21,000 00
	Total Free Assets		$41,300 00
	Deduct Liabilities Having Priority—per contra		
	Accrued Wages		250 00
$55,300 00			$41,050 00

Liabilities

Book Value			Expected to Rank
	Liabilities Having Priority		
$ 250 00	Accrued Wages—deducted contra		
	Fully Secured Liabilities:		
15,000 00	Mortgage Payable—deducted contra		
	Partially Secured Liabilities		
4,000 00	Notes Payable	$4,000 00	
	Deduct Bonds of *X* Co	3,200 00	$ 800 00
	Unsecured Liabilities		
25,000 00	Accounts Payable		25,000 00
	Capital:		
10,000 00	Capital Stock		
1,050 00	Surplus		
	Total Unsecured Liabilities		$25,800 00
	Excess of Net Free Assets over Unsecured Liabilities		15,250 00
$55,300 00			$41,050 00

support of a request for unsecured credit. The statement of affairs might be considered preferable to a balance sheet for that purpose because it shows the realizable values as well as the book values of the assets, and because the offsets of secured liabilities against pledged assets are clearly reflected.

If a statement of affairs is used for credit purposes, it will presumably show an excess of free assets over unsecured claims, thus indicating that the business is in such a good financial condition that all creditors may expect to be paid in full.

To illustrate the form of a statement of affairs for credit purposes, we may use the balance sheet of The Smith Company appearing on page 127 and increase the estimated realizable values of the assets The illustrative statement appears on page 142.

CHAPTER 39

RECEIVER'S ACCOUNTS

Opening new books.—It is rarely necessary to open new books for a company in financial difficulties unless the business is to be operated by a receiver in equity. The old books may be continued if the business is to be liquidated under bankruptcy proceedings or by an assignee under a voluntary assignment, or if the operations are to be continued under the supervision of a representative of the creditors.

If operations are to be continued under the direction of a receiver in equity, it is usually desirable to open new books, to indicate that there has been a transfer of assets to the receiver, and to distinguish clearly between liabilities incurred prior to the receivership, which will be left on the old books, and liabilities incurred by the receiver, which will be recorded on the new books.

The order of the court appointing the receiver usually states the assets to which he is to take title; these assets may include part or all of the corporation's property. The receiver should open his books by taking up these assets as well as any valuation reserves against them. But he should not take the liabilities onto his books. The liabilities existing prior to the receivership should remain on the corporation's books, so as to maintain a distinction between prior and subsequent debts.

The entries on both sets of books showing the transfer of the assets, are:

Receiver's Books	Corporation's Books
Assets taken over	*M*—Receiver
Reserves against Assets	Reserves against Assets
X Y Z Co —In Receivership	Assets

Payment of prior liabilities.—Although the receiver does not take the liabilities onto his books, he may be ordered by the court to pay them. In that case he should debit the

corporation and credit cash. But his debit entry should not be made in the account which was credited with the assets; temporary accounts with the corporation should be set up to furnish detailed information which the receiver will need in preparing his reports. The entries on both sets of books showing the payment of liabilities existing prior to the receivership, are:

Receiver's Books	Corporation's Books

X Y Z Co —Bonds Paid
    Cash
	Bonds Payable
	    M—Receiver

Since the liabilities appear on the corporation's books instead of on the receiver's books, the accrued interest should be recorded on the corporation's books. The receiver, however, will be expected to pay the interest, and the entries should be made in such a way as to distinguish between interest accrued prior to the receivership and interest accrued during the receivership, thus:

Receiver's Books	Corporation's Books

X Y Z Co —Accrued Interest Paid
    Cash
	Accrued Interest
	    M—Receiver

X Y Z Co —Interest Paid
    Cash
	Interest
	    M—Receiver

Recording operations.—The expenses and income of operations should be recorded on the receiver's books, and so far as possible the receiver should follow the same classification of accounts as the corporation formerly used, in order that comparative statements can be made for the receivership and prior periods.

Receiver's Books	Corporation's Books
Various Expense accounts Cash or Accounts Payable	
Cash or Accounts Receivable Sales	
Cash or Accounts Receivable Other Income accounts	

Closing the books.—At the end of the regular accounting periods, and more frequently if desired, the receiver's books should be closed. This closing follows the regular routine,

and no special points are involved except that the Profit and Loss account is closed to the account with the company in receivership. After the receiver has made up his statements, the special accounts with the company showing liabilities carried on the company books but paid by the receiver, should be closed to the main account with the company.

The corporation takes up the profit or loss shown by the receiver, by debiting the receiver's account and crediting Profit and Loss for a profit, or by debiting Profit and Loss and crediting the receiver if a loss is incurred. Any nominal accounts on the corporation's books are then closed to Profit and Loss, and the net profit or loss thus determined is closed to Surplus.

Periodical statements.—The statements prepared at the end of each accounting period should include a profit and loss statement and a balance sheet, which should embody the information recorded in both the company's books and the receiver's books. The balances shown by the two sets of books may be assembled on working papers provided with columns for the trial balances of the two ledgers, as illustrated on page 154.

Close of the receivership.—When the receivership is terminated, the receiver should close his books by recording the return to the corporation of such assets as he holds. Entries recording the termination of the receivership should be made on both sets of books as follows.

Receiver's Books	Corporation's Books
X Y Z Co —In Receivership	Assets
Reserves	Reserves
Assets	*M*—Receiver

If any unpaid liabilities appear on the receiver's books, they should also be transferred to the company's books.

Illustration

Basis of illustration.—The *C* Company found itself in financial difficulties, and F. C. White was appointed receiver as of June 30, 1934 The books were closed, and the balance sheet shown on page 148 was prepared.

C COMPANY

Balance Sheet—June 30, 1934

Assets

Current Assets:			
Cash		$ 1,800 00	
Accounts Receivable	$50,000 00		
Less Reserve for Bad Debts	1,500 00	48,500 00	
Notes Receivable		15,000 00	
Inventory		60,000 00	
Total Current Assets			$125,300 00
Marketable Securities			7,500 00
Fixed Assets:			
Land		$10,000 00	
Building	$80,000 00		
Less Reserve for Depreciation	15,000 00	65,000 00	
Furniture and Fixtures	$10,000 00		
Less Reserve for Depreciation	3,000 00	7,000 00	
Total Fixed Assets			82,000.00
Deferred Charges.			
Unexpired Insurance			900 00
			$215,700 00

Liabilities

Current Liabilities			
Accounts Payable		$95,000 00	
Notes Payable		25,000 00	
Accrued Mortgage Interest		500 00	
Total Current Liabilities			$120,500 00
Fixed Liabilities			
Mortgage Payable			50,000 00
Net Worth			
Capital Stock		$50,000 00	
Less Deficit		4,800 00	
Net Worth			45,200 00
			$215,700 00

On pages 150–153 will be found the entries, in journal form, recording the following facts on the books of the receiver and the books of the company. The transactions cover a period of a year.

(a) The receiver, under order of the court, took over all of the assets shown by the foregoing balance sheet. Note that the receiver, in taking up the accounts receivable, debits Accounts Receivable—Old to distinguish them from accounts receivable which will result from sales during the receivership.

(b) Merchandise purchases on account, $120,000 00.

(c) Sales on account, $200,000.00
(d) Cash collections amounting to $47,500 00 were obtained on the old accounts receivable The remaining accounts were written off as worthless, by charges to the Reserve for Bad Debts and to a special loss account.
(e) The notes receivable, $15,000 00, were collected in full.
(f) Interest in the amount of $300 00 was collected on these notes.
(g) New accounts receivable amounting to $160,000 00 were settled by cash collections of $157,700 00 and the allowance of cash discounts of $2,300 00
(h) Interest in the amount of $120 00 was collected on the marketable securities
(i) The marketable securities were sold for $7,350 00, or at a loss of $150.00.
(j) Prior liabilities were paid as follows:

Accounts payable	$95,000 00
Notes payable	25,000 00
Mortgage installment	5,000 00
Mortgage interest accrued on June 30, 1934	500 00

(k) The mortgage interest accrued from June 30, 1934 to June 30, 1935, was $2,950 00
(l) The receiver paid the accrued mortgage interest from June 30, 1934 to April 30, 1935, in the amount of $2,500 00.
(m) Receiver's accounts payable for merchandise purchases, in the amount of $75,000 00, were settled as follows. Cash payments were made in the amount of $73,600.00; and cash discounts were taken in the amount of $1,400 00.
(n) The following expenses were paid in cash.

Salaries and Wages	$17,000 00
Freight In	350 00
Delivery Expense	1,000 00
Taxes	1,200 00
General Expense	7,500 00

(o) Depreciation for the year was provided in the following amounts:

Building	$3,200 00
Furniture and Fixtures	1,000 00

(p) A reserve for bad debts in the amount of $1,200.00 was provided against the new accounts receivable.
(q) The insurance premium expiration for the year, chargeable to operations, was $550 00.

The merchandise inventory on June 30, 1935, was $23,000.00.

Receiver's Books

(a)	Cash	1,800	
	Accounts Receivable—Old	50,000	
	Notes Receivable	15,000	
	Inventory	60,000	
	Marketable Securities	7,500	
	Land	10,000	
	Building	80,000	
	Furniture and Fixtures	10,000	
	Unexpired Insurance	900	
	Reserve for Bad Debts—Old		1,500
	Reserve for Depreciation—Building		15,000
	Reserve for Depreciation—Furniture and Fixtures		3,000
	C Company—In Receivership		215,700
	To open the receiver's books.		
(b)	Purchases	120,000	
	Accounts Payable		120,000
	Purchases of merchandise.		
(c)	Accounts Receivable—New	200,000	
	Sales		200,000
	Sales on account		
(d)	Cash	47,500	
	Reserve for Bad Debts—Old	1,500	
	Loss on Accounts Receivable—Old	1,000	
	Accounts Receivable—Old		50,000
	Collections on old accounts receivable		
(e)	Cash	15,000	
	Notes Receivable		15,000
	Collection of notes in full		
(f)	Cash	300	
	Interest Income		300
	Interest collected on notes		
(g)	Cash	157,700	
	Discount on Sales	2,300	
	Accounts Receivable—New		160,000
	Collections on new accounts receivable.		
(h)	Cash	120	
	Interest Income		120
	Collected on securities.		
(i)	Cash	7,350	
	Loss on Securities	150	
	Marketable Securities		7,500
	Sale of securities		
(j)	*C* Company—Accounts Payable Paid	95,000	
	C Company—Notes Payable Paid.	25,000	
	C Company—Mortgage Payments	5,000	
	C Company—Mortgage Interest Paid	500	
	Cash		125,500
	Payment of prior liabilities.		

Company's Books

(a) F. C White—Receiver	215,700	
Reserve for Bad Debts	1,500	
Reserve for Depreciation—Building	15,000	
Reserve for Depreciation—Furniture and Fixtures	3,000	
Cash		1,800
Accounts Receivable		50,000
Notes Receivable		15,000
Inventory		60,000
Marketable Securities		7,500
Land		10,000
Building		80,000
Furniture and Fixtures		10,000
Unexpired Insurance		900
To charge the receiver with the assets taken over		

(j) Accounts Payable	95,000	
Notes Payable	25,000	
Mortgage Payable	5,000	
Accrued Mortgage Interest	500	
F C White—Receiver		125,500
Liabilities paid by receiver		

Receiver's Books

(l)	*C* Company—Mortgage Interest Paid	2,500	
	Cash.		2,500
	Payment of interest from June 30, 1934 to April 30, 1935		
(m)	Accounts Payable	75,000	
	Cash		73,600
	Discount on Purchases		1,400
	Payment for purchases		
(n)	Salaries and Wages	17,000	
	Freight In	350	
	Delivery Expense	1,000	
	Taxes	1,200	
	General Expense	7,500	
	Cash		27,050
	Payment of expenses		
(o)	Depreciation—Building	3,200	
	Depreciation—Furniture and Fixtures	1,000	
	Reserve for Depreciation—Building		3,200
	Reserve for Depreciation—Furniture and Fixtures		1,000
	Depreciation provisions for the year		
(p)	Bad Debts—Receiver's Sales	1,200	
	Reserve for Bad Debts—New		1,200
	Provision for losses		
(q)	Insurance	550	
	Unexpired Insurance		550
	To write off insurance expired during year		

Company's Books

(k) Mortgage Interest	2,950	
Accrued Mortgage Interest		2,950
Interest for year ended June 30, 1935		
(l) Accrued Mortgage Interest	2,500	
F. C White—Receiver		2,500
Payment of interest from June 30, 1934 to April 30, 1935		

C COMPANY—IN RECEIVERSHIP

Working Papers

For the Year Ended June 30, 1935

	Receiver's Trial Balance		Company's Trial Balance		Eliminations		Profit and Loss		Balance Sheet	
Cash	1,120								1,120	
Accounts Receivable—New	40,000								40 000	
Reserve for Bad Debts—New		1 200								1,200
Inventory—June 30, 1934	60,000						60,000			
Land	10,000								10,000	
Building	80,000								80,000	
Reserve for Depreciation—Building		18,200								18,200
Furniture and Fixtures	10,000								10,000	
Reserve for Depreciation—Furniture and Fixtures		4,000								4,000
Unexpired Insurance	350								350	
Accounts Payable		45,000								45,000
Accrued Mortgage Interest				450						450
Mortgage Payable				45,000						45 000
Capital Stock				50,000						50,000
Surplus			4,800						4,800	
F C White—Receiver			87,700		87,700					
C Company—In Receivership		215 700				215,700				
C Company—Accounts Payable Paid	95,000				95,000					
C Company—Notes Payable Paid	25,000				25,000					
C Company—Mortgage Payments	5,000				5,000					
C Company—Mortgage Interest Paid	3 000				3,000					
Sales		200,000						200,000		
Purchases	120,000						120,000			
Freight In	350						350			
Salaries and Wages	17,000						17,000			
Delivery Expense	1,000						1,000			
Taxes	1,200						1,200			
Insurance	550						550			
General Expense	7,500						7,500			
Depreciation—Building	3,200						3,200			
Depreciation—Furniture and Fixtures	1,000						1,000			
Bad Debts	1 200						1,200			
Discount on Sales	2,300						2,300			
Discount on Purchases		1,400						1,400		
Interest Income		420						420		
Mortgage Interest			2,950				2,950			
Loss on Accounts Receivable—Old	1,000						1,000			
Loss on Securities	150						150			
	485 920	485,920	95,450	95,450	215 700	215,700				
Inventory—June 30, 1935								23,000	23,000	
Net Income							5,420			5,420
							224 820	224 820	169 270	169,270

Working papers.—The working papers assembling the balances on the receiver's books and on the company's books appear on page 154. These working papers contain the information required for the balance sheet appearing below, and for the profit and loss statement on page 156.

Balance sheet.—The balance sheet as of June 30, 1935, prepared from the working papers, appears below.

C COMPANY—IN RECEIVERSHIP
F. C WHITE—RECEIVER
Balance Sheet—June 30, 1935

Assets			
Current Assets:			
Cash		$ 1,120 00	
Accounts Receivable—New	$40,000 00		
Less Reserve for Bad Debts	1,200 00	38,800 00	
Inventory		23,000 00	
Total Current Assets			$ 62,920 00
Fixed Assets			
Land		$10,000 00	
Building	$80,000 00		
Less Reserve for Depreciation	18,200 00		
Depreciated Value		61,800 00	
Furniture and Fixtures	$10,000 00		
Less Reserve for Depreciation	4,000 00	6,000 00	
Total Fixed Assets.			77,800 00
Deferred Charges			
Unexpired Insurance			350 00
			$141,070 00
Liabilities			
Current Liabilities.			
Accounts Payable		$45,000 00	
Accrued Mortgage Interest		450 00	
Total Current Liabilities			$ 45,450 00
Fixed Liabilities			
Mortgage Payable			45,000 00
Net Worth:			
Capital Stock		$50,000 00	
Surplus:			
Deficit, June 30, 1934	$ 4,800 00		
Surplus for the Year	5,420 00	620 00	50,620 00
			$141,070 00

Profit and loss statement.—The profit and loss statement for the year ended June 30, 1935, showing the results of operations as recorded on the books of the receiver and those of the company, appears on page 156.

C COMPANY—IN RECEIVERSHIP
F. C. WHITE—RECEIVER
Profit and Loss Statement
For the Year Ended June 30, 1935

Sales			$200,000 00
Less Cost of Goods Sold			
Inventory, June 30, 1934		$ 60,000 00	
Purchases	$120,000 00		
Freight In	350 00	120,350 00	
Total		$180,350 00	
Less Inventory, June 30, 1935		23,000 00	
Remainder—Cost of Goods Sold			157,350 00
Gross Profit on Sales			$ 42,650 00
Less Operating Expenses:			
Salaries and Wages		$ 17,000 00	
Delivery Expense		1,000 00	
Taxes		1,200 00	
Insurance		550 00	
General Expense		7,500 00	
Depreciation:			
Building		3,200 00	
Furniture and Fixtures		1,000 00	
Bad Debts—Receiver's Sales		1,200 00	
Total Operating Expenses			32,650 00
Net Operating Profit			$ 10,000 00
Interest and Discount—Receiver's Operations			
Discount on Sales		$ 2,300 00	
Deduct:			
Discount on Purchases	$ 1,400 00		
Interest Income	420 00	1,820 00	480 00
Net Income before Realization Losses and Mortgage Interest			$ 9,520 00
Deduct Realization Losses			
Marketable Securities		$ 150 00	
Accounts Receivable—Old		1,000 00	1,150 00
Net Income before Mortgage Interest			$ 8,370 00
Deduct Mortgage Interest			2,950.00
Net Increase in Surplus during the Year			$ 5,420 00

Closing the books.—The following entries show the procedure of closing both sets of books.

Receiver's Books

Sales	200,000 00	
Profit and Loss		200,000 00
To close the Sales account		
Profit and Loss	180,350 00	
Inventory—June 30, 1934		60,000 00
Purchases		120,000 00
Freight In		350 00
To close accounts showing merchandise costs.		

Inventory—June 30, 1935	23,000 00	
Profit and Loss		23,000 00
To set up the inventory at the end of the year.		
Profit and Loss	32,650 00	
Salaries and Wages		17,000 00
Delivery Expense		1,000 00
Taxes		1,200 00
Insurance		550 00
General Expense		7,500 00
Depreciation—Building		3,200 00
Depreciation—Furniture and Fixtures		1,000 00
Bad Debts		1,200 00
To close the expense accounts		
Discount on Purchases	1,400 00	
Interest Income	420 00	
Profit and Loss	480 00	
Discount on Sales		2,300 00
To close the interest and cash discount accounts		
Profit and Loss	1,150 00	
Loss on Accounts Receivable—Old		1,000 00
Loss on Securities		150 00
To close out the realization losses		
Profit and Loss	8,370 00	
C Company—In Receivership		8,370 00
To close the Profit and Loss account		
C Company—In Receivership	128,000 00	
C Company—Accounts Payable Paid		95,000 00
C Company—Notes Payable Paid		25,000 00
C Company—Mortgage Payments		5,000 00
C Company—Mortgage Interest Paid		3,000 00
To close the temporary accounts showing liability payments		

Corporation's Books

F C White—Receiver	8,370 00	
Profit and Loss		8,370 00
To take up the net profit before mortgage interest, as shown by the receiver's books		
Profit and Loss	2,950 00	
Mortgage Interest		2,950.00
To close the interest account		
Profit and Loss	5,420 00	
Surplus		5,420 00
To close net income to Surplus		

Reconciliation of reciprocal accounts.—After the two sets of books have been closed, trial balances should be drawn off and a statement should be prepared to reconcile the reciprocal accounts and to prove that the accounts on the two sets of books agree with the balance sheet.

Working Papers After Closing

Debits	Receiver's Books	Company's Books	Eliminations	Combined
Cash	$ 1,120			$ 1,120
Accounts Receivable—New	40,000			40,000
Inventory	23,000			23,000
Land	10,000			10,000
Building	80,000			80,000
Furniture and Fixtures	10,000			10,000
Unexpired Insurance	350			350
F. C White—Receiver		$96,070	$96,070	
	$164,470	$96,070	$96,070	$164,470
Credits				
Accounts Payable	$ 45,000			$ 45,000
Accrued Mortgage Interest		$ 450		450
Mortgage Payable		45,000		45,000
Reserve for Bad Debts	1,200			1,200
Reserve for Depreciation—Building	18,200			18,200
Reserve for Depreciation—Furniture and Fixtures	4,000			4,000
C Company—In Receivership	96,070		$96,070	
Capital Stock		50,000		50,000
Surplus		620		620
	$164,470	$96,070	$96,070	$164,470

Close of the receivership.—If the receivership is terminated at this point, an entry should be made on the receiver's books as follows:

Accounts Payable	45,000	
Reserve for Bad Debts	1,200	
Reserve for Depreciation—Building	18,200	
Reserve for Depreciation—Furniture and Fixtures	4,000	
C Company—In Receivership	96,070	
Cash		1,120
Accounts Receivable—New		40,000
Inventory		23,000
Land		10,000
Building		80,000
Furniture and Fixtures		10,000
Unexpired Insurance		350
To close the receiver's books, recording the termination of the receivership		

The company's books should contain a contra entry, debiting the assets, crediting the liabilities and reserves, and crediting F. C. White—Receiver for the net assets.

CHAPTER 40

REALIZATION AND LIQUIDATION ACCOUNT

Purpose.—Statements in the form illustrated in this chapter may be used to show a court or the creditors of an insolvent business what has been accomplished, during a stated period of time, in the realization of assets and the liquidation of liabilities, what expenses have been incurred, and what income has been earned. The statement is usually supplemented by a cash account, a profit and loss statement, and a balance sheet.

The statement is called an account because it is drawn up in account form with debit and credit sides; it should be called a statement because it does not appear in the ledger.

Elements of the statement.—As shown by the illustration on the following page, this statement shows the following facts:

With respect to assets.	
Assets To Be Realized	Assets Realized
(Assets at the opening date of the statement)	(Proceeds from disposal of assets)
Assets Acquired	Assets Not Realized
(Additional assets discovered or acquired)	(Assets at closing date of statement)
With respect to liabilities:	
Liabilities Liquidated	Liabilities To Be Liquidated
(Payments to creditors)	(At opening date of statement)
Liabilities Not Liquidated	Liabilities Assumed
(At closing date of statement)	(Discovered or incurred)
With respect to expense and income:	
Supplementary Charges	Supplementary Credits
(Expenses)	(Income)

JAMES BUTLER

F. S. MONTGOMERY—TRUSTEE IN BANKRUPTCY

Realization and Liquidation Account

June 16, 1934 to August 31, 1934

Assets To Be Realized:			Liabilities To Be Liquidated.		
(a) Land and Buildings	$14,500 00		(a) Accounts Payable		$28,000 00
(a) Merchandise	8,000 00				
(a) Accounts Receivable	7,000 00		Liabilities Assumed.		
(a) Notes Receivable	3,000 00	$32,500.00	(b) Accounts Payable		500 00
Assets Acquired:			Supplementary Credits		
(b) Merchandise		500.00	(f) Interest on Notes Receivable		10 00
Supplementary Charges			Assets Realized:		
(g) Expense		200.00	(c) Merchandise	$ 5,500 00	
			(d) Accounts Receivable	4,500 00	
Liabilities Liquidated.			(e) Notes Receivable	2,000 00	12,000 00
(h) Accounts Payable		11,000 00			
			Assets Not Realized		
Liabilities Not Liquidated:			Accounts Receivable	$ 2,500 00	
Accounts Payable		17,500 00	Land and Buildings	14,500 00	17,000 00
			Loss on Realization		4,190 00
		$61,700 00			$61,700 00

Components of loss or gain.—It is usually difficult to understand why this statement, which shows facts with respect to assets and liabilities as well as facts with respect to income and expense, should have a balance showing a loss or a gain. The reason should be apparent from the following regrouping of the major items of the statement:

Facts about Assets:			
Debit side of statement:			
Assets to be realized	$32,500 00		
Assets acquired	500 00	$33,000 00	
Credit side of statement			
Assets realized	$12,000 00		
Assets not realized	17,000 00	29,000 00	
Loss on realization of assets	......	...	$4,000 00
Facts about Liabilities:			
Credit side of statement:			
Liabilities to be liquidated	$28,000 00		
Liabilities assumed	500.00	$28,500 00	
Debit side of statement			
Liabilities liquidated	$11,000 00		
Liabilities not liquidated	17,500 00	28,500 00	
Gain or loss—none		—	
Facts about Expense and Income:			
Supplementary charges—expenses		$ 200 00	
Supplementary credits—income		10 00	
Net Expense			190 00
Net Loss			$4,190 00

Trustee's cash account.—The cash account to accompany the statement on page 160 is shown below

JAMES BUTLER

F. S. MONTGOMERY—TRUSTEE IN BANKRUPTCY

Cash Account

June 16, 1934 to August 31, 1934

(a) Balance—June 16	$ 700 00	(g) Expense	$ 200 00
(c) Merchandise	5,500.00	(h) Accounts Payable .	11,000 00
(d) Accounts Receivable	4,500 00	Balance—August 31	1,510 00
(e) Notes Receivable	2,000 00		
(f) Int on Notes Rec	10 00		
	$12,710 00		$12,710 00

Procedure in preparing statements.—The letters in the cash account and in the realization and liquidation account on page 160 are included merely for purposes of explanation in this chapter.

The preparation of the realization and liquidation account and the accompanying cash account will not be found difficult or confusing if they are built up by offsetting debit and credit entries. The following entries should be traced to the statements:

(a) The assets, liabilities, and capital as of June 16 are "journalized" in the statements as follows.

Debits Under Assets To Be Realized—all assets other than cash.

In the cash account—the opening cash balance.

Credits: Under Liabilities To Be Liquidated—all liabilities.

In a memorandum Capital account—the opening net worth, thus:

Memorandum Capital Account

		(a) Net Worth June 16	5,200 00

(b) Merchandise was purchased at a cost of $500 00.

Debit: Under Assets Acquired—the cost of the merchandise

Credit. Under Liabilities Assumed—the amount of the account payable

(c) Merchandise was sold for cash, $5,500 00:

Debit: In the cash account

Credit. Under Assets Realized.

(d) Accounts receivable were collected in the amount of $4,-500.00

Debit In the cash account.

Credit. Under Assets Realized.

(e) Notes receivable were collected in the amount of $2,000 00:

Debit: In the cash account.

Credit. Under Assets Realized.

(f) Interest on notes receivable was collected in the amount of $10 00:

Debit In the cash account.

Credit. Under Supplementary Credits

(g) Expenses were paid in the amount of $200 00.

Debit. Under Supplementary Charges

Credit: In the cash account.

(h) Accounts payable were paid in the amount of $11,000 00.

Debit: Under Liabilities Liquidated

Credit: In the cash account

To complete the realization and liquidation account, the assets (other than cash) at the end of the period were entered under the Assets Not Realized caption, the unpaid liabilities were entered under the Liabilities Not Liquidated caption; and the Loss on Realization was entered to balance the statement.

To prove the loss shown in the realization and liquidation account, the following realization profit and loss statement was prepared.

JAMES BUTLER
F. S. MONTGOMERY—TRUSTEE IN BANKRUPTCY
Realization Profit and Loss Statement
July 16, 1934 to August 31, 1934

Losses on Realization.		
Merchandise	$3,000 00	
Notes Receivable	1,000 00	
Total		$4,000 00
Expense		200 00
Total Loss and Expense		$4,200 00
Deduct Interest on Notes Receivable		10 00
Net Loss		$4,190 00

This loss was then deducted from the $5,200 00 credit in the memorandum Capital account (which showed the net worth at the beginning of the period) to determine the net worth of $1,010.00 at the end of the period, and the following balance sheet was prepared from the data shown by the Assets Not Realized and the Liabilities Not Liquidated sections of the realization and liquidation account, by the balance in the cash account, and by the balance in the memorandum Capital account.

JAMES BUTLER
F. S. MONTGOMERY—TRUSTEE IN BANKRUPTCY
Balance Sheet—August 31, 1934

Assets		Liabilities	
Accounts Receivable	$ 2,500 00	Accounts Payable	$17,500 00
Land and Buildings	14,500 00	James Butler, Capital.	1,010 00
Cash	1,510 00		
	$18,510 00		$18,510 00

Reserves.—If reserves have been set up against the assets, they should be deducted from the assets in the Assets To Be Realized section, thus:

Assets To Be Realized		
Timber Lands	$300,000 00	
Less Reserve for Depletion	75,000 00	$225,000 00
Machinery	$ 15,000 00	
Less Reserve for Depreciation	3,000 00	12,000 00
Accounts Receivable	$ 1,250 00	
Less Reserve for Bad Debts	350 00	900 00

When the assets not realized are entered at the close of the statement, the reserves should again be deducted. Assuming that the operations of the business have been carried on by a receiver in equity, that $5,000.00 depletion and $600.00 depreciation have been charged off, and that $700.00 of the accounts receivable have been collected, while $100.00 has been charged to the reserve, the accounts would be shown thus:

Assets Not Realized.		
Timber Lands	$300,000 00	
Less Reserve for Depletion	80,000 00	$220,000 00
Machinery	$ 15,000 00	
Less Reserve for Depreciation	3,600 00	11,400 00
Accounts Receivable	$ 450 00	
Less Reserve for Bad Debts	250 00	200 00

The $5,000.00 depletion and the $600.00 depreciation would appear in the realization profit and loss statement, but the $100.00 loss on accounts receivable would not appear in the profit and loss statement, because the loss was absorbed in the reserve.

Sales and purchases.—If business operations are continued during the receivership, the materials or merchandise purchased may be shown in the realization and liquidation account as Assets Acquired or as Supplementary Charges, and sales may be shown as Assets Realized or as Supplementary Credits.

Accruals.—The question of accruals presents some difficulty. To illustrate, assume that $15.00 of accrued interest on notes receivable is shown in the Assets To Be Realized section. By the time the notes are collected, $5 00 additional interest has accrued, so that $20.00 is collected. The accrual and the collection of interest may be handled in either of two ways:

First method:

Cash	20 00	
Assets Realized		15 00
Supplementary Credits		5.00

Second method

Assets Acquired (Accrued Interest)	5 00	
Supplementary Credits		5 00
Cash	20 00	
Assets Realized . . .		20 00

Similar methods may be used for accrued expenses.

Discounts.—Two methods are available for dealing with discounts and allowances, either to customers or from creditors. To illustrate, assume that $8,000.00 of accounts receivable are taken over by the receiver, who continues operations. Discounts of $75.00 and allowances of $150 00 are given to the customers, and the balance is collected in full. The two methods of dealing with the discounts and allowances are shown below.

First method:

Assets To Be Realized		Assets Realized	
Accounts Receivable	$8,000 00	Accounts Receivable	$7,775 00

By this method, the discounts and allowances are not shown, but the $225.00 excess of debits over credits will be included in the loss on realization.

Second method:

Assets To Be Realized:						
Accounts Receivable. ..		$8,000 00				
Supplementary Charges			Assets Realized			
Discounts to			Accounts Receivable			
Customers	$ 75 00		Discounts	$ 75 00		
Allowances to			Allowances	150 00		
Customers	150 00	225.00	Cash	7,775 00	$8,000 00	

Similar methods may be used for discounts and allowances from creditors.

Premium or discount on securities.—If securities owned are sold at a profit or a loss, the profit or the loss is not shown

as a separate item. The book value is shown under Assets To Be Realized, and the price received is shown under Assets Realized. But if outstanding bonds or other liabilities are redeemed at a premium or a discount, the face of the liability should be shown under Liabilities Liquidated; any discount on redemption should be shown under Supplementary Credits, and any premium on redemption should be shown under Supplementary Charges.

To illustrate, assume that a company holds \$5,000.00 of bonds for which it paid par; these bonds are sold for \$4,960.00. The company also has \$20,000.00 of bonds outstanding which are redeemed for \$19,000.00. The facts may be shown thus:

Realization and Liquidation Account

Assets To Be Realized		Liabilities To Be Liquidated	
Bonds of X Company.	\$ 5,000.00	Bonds Payable	\$20,000 00
Liabilities Liquidated		Supplementary Credits.	
Bonds Payable .	20,000.00	Discount on Bonds Payable	1,000 00
		Assets Realized	
		Bonds of X Company.	4,960 00

Composition with creditors.—If creditors agree to accept a certain number of cents on the dollar, the old indebtedness is, according to law, canceled by the agreement and a new indebtedness takes its place. Assume that there were \$20,000.00 of accounts payable, that the creditors agreed to accept seventy-five cents on the dollar, and that twenty cents (of the seventy-five) had been paid at the time of preparing the realization and liquidation account; the facts would be shown as follows.

		Liabilities To Be Liquidated	
		Accounts Payable ...	\$20,000
Liabilities Liquidated.		Liabilities Incurred:	
Accounts Payable—settled at 75¢ on the dollar	\$20,000	Accounts Payable—composition agreement to accept 75¢ on the dollar in settlement of accounts payable . .	15,000
Accounts Payable—payments under composition agreement .	4,000		
Liabilities Not Liquidated:		Supplementary Credits:	
Accounts Payable........	11,000	Composition Gain .	5,000

Old and new accounts.—If the receiver continues operations, any liabilities which he incurs should be kept entirely separate from the old liabilities, because of the prior rights

which the receiver's creditors enjoy. The two classes may be designated as old accounts payable, and receiver's accounts payable or receiver's certificates.

Accounts receivable should be similarly separated, not because of any difference in the claims against the two classes of debtors, but because, with respect to old accounts receivable, the receiver is responsible only for diligence in collection, whereas, with respect to new accounts, he is responsible also for the exercise of good judgment in granting credits.

Continued operations.—When operations are continued by a receiver, the realization and liquidation account is more complicated, because of the necessity of showing operating transactions. However, the "journalizing" procedure can still be used effectively in the preparation of the statements. The statements on pages 168 and 169 are based on the illustration, in the preceding chapter, of the operations of F. C. White, as receiver for the *C* Company. Letters have again been inserted in the statements for reference purposes. The following details should be traced to the statements:

(a) The assets, liabilities, and net worth as of June 30, 1934, the beginning of the receivership, are entered in the statement as follows:
  Debits. Cash—in the cash account.
    Other assets—Under Assets To Be Realized
  Credits: Liabilities—under Liabilities To Be Liquidated.
    Capital Stock and Deficit—in the memorandum Capital account.

(b) Purchases on account, $120,000.00:
  Debit. Supplementary Charges—Purchases.
  Credit: Liabilities Assumed—Accounts Payable.

(c) Sales on account, $200,000.00.
  Debit: Assets Acquired—Accounts Receivable.
  Credit: Supplementary Credits—Sales.

(d) Cash collections of $47,500 00 were obtained on old accounts receivable; the remaining accounts were uncollectible.
  Debit: Cash
  Credit: Assets Realized.

(e) The notes receivable, $15,000 00, were collected in full:
  Debit: Cash.
  Credit: Assets Realized.

(*Continued on page* 170)

THE *C* COMPANY—IN RECEIVERSHIP
F. C. WHITE—RECEIVER
Realization and Liquidation Account
July 1, 1934 to June 30, 1935

Assets To Be Realized			
(a) Accounts Receivable—Old	$50,000		
(a) Less Reserve for Bad Debts	1,500	$ 48,500	
(a) Notes Receivable—Old		15,000	
(a) Inventory		60,000	
(a) Marketable Securities		7,500	
(a) Land		10,000	
(a) Building	$80,000		
(a) Less Reserve for Depreciation	15,000	65,000	
(a) Furniture and Fixtures	$10,000		
(a) Less Reserve for Depreciation	3,000	7,000	
(a) Unexpired Insurance		900	$213,900
Assets Acquired			
(c) Accounts Receivable—New			200,000
Supplementary Charges			
(b) Purchases		$120,000	
(g) Discount on Sales		2,300	
(k) Mortgage Interest—June 30, 1934 to June 30, 1935		2,950	
(n) Salaries and Wages		17,000	
(n) Freight In		350	
(n) Delivery Expense		1,000	
(n) Taxes		1,200	
(n) General Expense		7,500	152,300
Liabilities Liquidated			
(j) Accounts Payable—Old		$ 95,000	
(j) Notes Payable—Old		25,000	
(j) Mortgage Interest Accrued—June 30, 1934		500	
(j) Mortgage Installment		5,000	
(l) Mortgage Interest—June 30, 1934 to April 30, 1935		2,500	
(m) Accounts Payable—Receiver's Purchases		75,000	203,000
Liabilities Not Liquidated			
Accounts Payable		$ 45,000	
Mortgage Payable		45,000	
Accrued Interest on Mortgage		450	90,450
Net Profit on Realization			5,420
			$865,070

Liabilities To Be Liquidated:			
(a) Accounts Payable—Old		$ 95,000	
(a) Notes Payable		25,000	
(a) Accrued Mortgage Interest		500	
(a) Mortgage Payable		50,000	$170,500
Liabilities Assumed			
(b) Accounts Payable—Purchases		$120,000	
(k) Accrued Mortgage Interest—From June 30, 1934 to June 30, 1935		2,950	122,950
Supplementary Credits.			
(c) Sales		$200,000	
(f) Interest on Notes Receivable		300	
(h) Interest on Securities		120	
(m) Discount on Purchases		1,400	201,820
Assets Realized:			
(d) Accounts Receivable—Old		$ 47,500	
(e) Notes Receivable		15,000	
(g) Accounts Receivable—New		160,000	
(i) Marketable Securities		7,350	229,850
Assets Not Realized			
Accounts Receivable—New	$40,000		
Less Reserve for Bad Debts.	1,200	$ 38,800	
Inventory.		23,000	
Land		10,000	
Building	$80,000		
Less Reserve for Depreciation.	18,200	61,800	
Furniture and Fixtures	$10,000		
Less Reserve for Depreciation.	4,000	6,000	
Unexpired Insurance		350	139,950
			$865,070

THE *C* COMPANY—IN RECEIVERSHIP

F. C. WHITE—RECEIVER

Cash Account

July 1, 1934 to June 30, 1935

(a) Balance—June 30, 1934	$ 1,800	(j) Accounts Payable—Old	$ 95,000
(d) Accounts Receivable—Old.	47,500	(j) Notes Payable—Old	25,000
(e) Notes Receivable	15,000	(j) Mortgage Installment	5,000
(f) Interest on Notes Receivable	300	(j) Mortgage Interest Accrued June 30, 1934	500
(g) Accounts Receivable—New	157,700	(l) Mortgage Interest—June 30, 1934 to April 30, 1935	2,500
(h) Interest on Securities	120	(m) Accounts Payable—New	73,600
(i) Marketable Securities	7,350	(n) Salaries and Wages	17,000
		(n) Freight In	350
		(n) Delivery Expense	1,000
		(n) Taxes	1,200
		(n) General Expense	7,500
		Balance, June 30, 1935	1,120
	$229,770		$229 770

Memorandum Capital Account

(a) Deficit—June 30, 1934	$ 4,800 00	(a) Capital Stock	$50,000 00
Net Worth—June 30, 1935	50,620 00	Net Profit	5,420 00
	$55,420 00		$55,420 00

(f) Interest in the amount of $300 00 was collected on the notes:
Debit. Cash
Credit Supplementary Credits—Interest.

(g) New accounts receivable amounting to $160,000.00 were settled by cash collections of $157,700 00, and the allowance of cash discounts of $2,300 00:
Debits: Cash, $157,700 00
Supplementary Charges—Discount on Sales, $2,300 00
Credit: Assets Realized—Accounts Receivable, $160,-000 00

(h) Interest of $120.00 was collected on the marketable securities:
Debit Cash.
Credit. Supplementary Credits

(i) The marketable securities were sold for $7,350 00.
Debit: Cash
Credit: Assets Realized.

(j) Prior liabilities were paid as follows accounts payable, $95,000 00; notes payable, $25,000.00; mortgage installment, $5,000 00, mortgage interest accrued to June 30, 1934, $500.00:
Debit Liabilities Liquidated.
Credit: Cash

(k) The mortgage interest accrued from June 30, 1934 to June 30, 1935, was $2,950.00
Debit· Supplementary Charges.
Credit: Liabilities Assumed.

(l) The receiver paid the accrued interest from June 30, 1934 to April 30, 1935, in the amount of $2,500.00
Debit: Liabilities Liquidated.
Credit. Cash

(m) Receiver's accounts payable for merchandise purchases were settled in the amount of $75,000 00 as follows cash payment, $73,600 00; cash discounts taken, $1,400.00·
Debit. Liabilities Liquidated—Accounts Payable, $75,000 00.
Credits: Cash, $73,600 00.
Supplementary Credits—Discount on Purchases, $1,400.00

(n) The receiver paid expenses, as detailed in the statements
Debit: Supplementary Charges.
Credit: Cash.

The assets as of June 30, 1935 (after providing for depreciation of the building and of the furniture and fixtures and for losses on bad debts, and after writing off the insurance premiums expired during the year) were next entered under Assets Not Realized; the liabilities at the end of the period were entered under Liabilities Not Liquidated, and the statement was balanced by entering the net profit for the year. This net profit should also be entered in the memorandum Capital account to determine whether the resulting net worth will balance the net assets.

In addition to the realization and liquidation account and the cash account, the receiver should prepare a profit and loss statement similar to the one on page 156 of the preceding chapter, and a balance sheet similar to the one on page 155 of the preceding chapter.

CHAPTER 41

STATEMENT OF REALIZATION, LIQUIDATION, AND OPERATIONS

Purpose.—The realization and liquidation account illustrated in the preceding chapter is the traditional form for the presentation of data with respect to realization and liquidation, but it is somewhat confusing and is not admirably adapted to its purpose. It is believed that the statement illustrated in this chapter presents the data more clearly, and hence is more satisfactory.

First illustration.—The statement on page 174 is based on the same facts as those used in the first illustration in the preceding chapter. Attention is directed to the following matters:

The financial condition at the beginning of the period is shown in the first column; the financial condition at the end of the period is shown in the last column.

The cash receipts and disbursements are detailed in the two Cash columns. After these two columns are footed, their totals are entered in the cash summary at the top of the statement, to determine the cash balance at the end of the period.

The changes in the other assets are fully described. For example, starting with merchandise valued at \$8,000.00, the trustee made purchases of \$500.00, received \$5,500.00 as proceeds of sales, lost \$3,000.00 on sales, and had no merchandise at the end of the period.

The changes in each liability are similarly described. Starting with accounts payable of \$28,000.00, the trustee incurred \$500.00 of additional liabilities for purchases, made payments of \$11,000.00, and had \$17,500.00 of unpaid accounts at the end of the period.

The Net Worth section shows the net worth at the beginning of the period, the net loss for the period (as a

(First Illustration)

JAMES BUTLER

F. S. MONTGOMERY—TRUSTEE

Statement of Realization, Liquidation, and Operations

June 16, 1934 to August 31, 1934

		Balances, June 16, 1934	Miscellaneous		Cash		Profit and Loss		Balances, August 31, 1934
			Charges	Credits	Receipts	Payments	Charges	Credits	
ASSETS									
Cash									
Balance, June 16, 1934	$ 700	$ 700							
Total Receipts	12,010								
Total	$12,710								
Total Payments	11,200								
Balance, August 31, 1934	$ 1,510								$ 1,510
Merchandise		8,000							
Purchases			$ 500						
Proceeds of Sales					$ 5,500				
Loss on Sales							$ 3,000		
Accounts Receivable		7,000							
Collections.					4,500				
Balance									2,500
Notes Receivable		3,000							
Collections					2,000				
Losses							1,000		
Interest on Notes Receivable					10			$ 10	
Land and Building		14,500							14,500
Total Assets		$33,200							$18,510
LIABILITIES									
Accounts Payable		$28,000							
Incurred for Purchases				$ 500					
Paid						$11,000			
Unpaid									$17,500
Expenses						200	200		
Total Liabilities		$28,000							$17,500
NET WORTH									
James Butler, Capital		$ 5,200							
Net Loss								4,190	
Balance, August 31, 1934									$ 1,010
			$ 500	$ 500	$12,010	$11,200	$ 4,200	$ 4,200	

balancing figure in the Profit and Loss columns), and the net worth at the end of the period.

The Miscellaneous columns include all items not classified in the Cash and the Profit and Loss columns. The debits and credits in these columns are equal.

The Profit and Loss columns show the details accounting for the net loss of \$4,190.00. Glancing down these columns, we find that \$3,000.00 was lost on sales of merchandise, and \$1,000.00 on uncollectible notes receivable, that \$200 00 of expenses were incurred; and that \$10 00 of interest was earned on notes receivable.

Second illustration.—The statement on pages 176 and 177 is based on the same facts as the second illustration in the preceding chapter It should not be necessary to refer to the preceding chapter to determine the facts, as the statement in this chapter is self-explanatory.

Attention is directed to the method of introducing income items into the Asset section of the statement. It will be noted that the interest on notes receivable and on securities is shown immediately below the notes and the securities. Income should be shown in the Asset section even if there were no accrued items to appear in the Balance columns at either the beginning or end of the period.

Attention is also directed to the method of introducing expense items into the Liability section of the statement. Interest on the mortgage is shown immediately below the mortgage. The absence of balances on the lines for Salaries and Wages, Freight In, Delivery Expense, Taxes, and General Expense shows that there were no unpaid liabilities for such expenses at either the beginning or end of the period.

Third illustration.—The statement on pages 178, 179, and 180 is based on assumed facts not used in any previous illustration. It is presented without any preliminary listing of the facts, as they are shown clearly by the statement itself

In the solution of problems which require the preparation of statements of this nature, space should be left after each asset and liability sufficient to provide for the requirements of the problem.

(Second Illustration)

THE *C* COMPANY—IN RECEIVERSHIP
F S. WHITE—RECEIVER
Statement of Realization, Liquidation, and Operations
Year Ended June 30, 1935

		Balances, June 30, 1934	Miscellaneous		Cash		Profit and Loss		Balances, June 30, 1935
			Charges	Credits	Receipts	Payments	Charges	Credits	
ASSETS.									
Cash									
Balance, June 30, 1934	$ 1,800	$ 1,800							
Total Receipts	227,970								
Total	$229,770								
Total Payments	228,650								
Balance, June 30, 1935	$ 1,120								$ 1,120
Accounts Receivable—Old		50,000							
Collections					$ 47,500				
Losses charged to the Reserve				$ 1,500					
Losses charged to Profit and Loss							$ 1,000		
Reserve for Bad Debts		1,500*							
Charges for Losses			$ 1,500						
Accounts Receivable—New—from Sales								$200,000	
Collections and Cash Discounts					157,700		2,300		
Balance Uncollected									40,000
Reserve for Bad Debts—for New Accounts							1,200		1,200*
Notes Receivable—Old		15,000			15,000				
Interest on Notes Receivable					300			300	
Merchandise		60,000							
Purchases			120,000						
Cost of Goods Sold							157,000		
Inventory, June 30, 1935									23,000
Marketable Securities		7,500							
Proceeds of Sale, and Loss					7,350		150		
Interest on Securities					120			120	
Land		10,000							10,000
Building		80,000							80,000
Reserve for Depreciation—Building		15,000*							
Depreciation for the Year							3,200		
Reserve, June 30, 1935									18,200*
Furniture and Fixtures		10,000							10,000

Reserve for Depreciation—Furniture and Fixtures	3,000*							
Depreciation for the Year						1,000		
Reserve, June 30, 1935								4,000*
Unexpired Insurance	900							
Expired during the Year						550		
Balance—Unexpired								350
Total Assets	$215,700							$141,070
LIABILITIES								
Accounts Payable—Old	$ 95,000							
Payments					$ 95,000			
Accounts Payable—New—from Purchases			$120,000					
Payments and Discounts					73,600		1,400	
Balance								$ 45,000
Notes Payable—Old	25,000							
Payments					25,000			
Mortgage Payable	50,000							
Payments					5,000			
Balance								45,000
Mortgage Interest								
Accrued June 30, 1935	500				500			
Accrued during the Year					2 500	2,950		450
Salaries and Wages					17,000	17,000		
Freight In					350	350		
Delivery Expense					1,000	1,000		
Taxes					1 200	1,200		
General Expense					7,500	7,500		
Total Liabilities	$170,500							$ 90 450
NET WORTH								
Capital Stock	$ 50,000							$ 50,000
Deficit, June 30, 1934	4,800*							
Net Profit for the Year						5,420		
Surplus, June 30, 1935								620
Total Net Worth	$ 45,200							$ 50,620
		$121 500	$121 500	$227 970	$228 650	$201 820	$201 820	

*Deduction

(Third Illustration)

MARTIN AND DUNCAN

Statement of Realization, Liquidation, and Operations

Year Ended December 31, 1934

		Balances, December 31, 1933	Miscellaneous		Cash		Profit and Loss		Balances, December 31, 1934
			Charges	Credits	Receipts	Payments	Charges	Credits	
Assets:									
Cash									
Balance, December 31, 1933	$ 500	$ 500							
Total Receipts	354,770								
Total	$355,270								
Total Payments	354,420								
Balance, December 31, 1934	$ 850								$ 850
Accounts Receivable—Old		60,000							
Collections					$ 48,000				
Discounts Allowed							$ 600		
Written Off to Reserve				$ 3,200					
Balance									8,200
Reserve for Bad Debts		5,000*							
Charges for Accounts Written Off.			$ 3,200						
Balance.									1,800*
Notes Receivable—Old		40 000							
Collections.					29,300				
Securities Accepted in Settlement				10,000					
Losses							700		
Balance									—
Securities—Taken for Notes			10 000						10,000
Reserve to Reduce to Market Value							1,500		1,500*
Interest on Securities									
Collected					120			$ 120	
Accrued but Not Collected								130	130
Accounts Receivable—New									
Sales								300,000	
Collected					260,000				
Discounts Allowed							1 150		
Settled by Notes				25,000					
Written Off to Reserve				1,000					
Balance									12,850
Reserve for Bad Debts									
Amount Credited to Reserve							3,000		
Charges for Accounts Written Off			1,000						
Balance									2,000*
Notes Receivable—New									
Taken in Settlement of New Accounts			25,000						
Collections					15,000				
Balance									10,000

Interest on *Notes Receivable*								
Collected				350			350	
Accrued							250	250
Finished Goods	50,000							
Decrease during Year						12,000		
Balance								38,000
Goods in Process	7,700							
Increase during Year							2,000	
Balance								9,700
Raw Materials	35,000							
Purchases		95 000						
Used						105,000		
Balance								25,000
Land	20,000							20,000
Buildings	60,000							60,000
Reserve for Depreciation	9,800*							
Depreciation for the Year						1,800		
Balance								11,600*
Building Rental Income				2,000			2,000	
Machinery	80,000							
Purchases					$ 3,500			
Fully Depreciated—Written Off			6,000					
Balance								77,500
Reserve for Depreciation	25,000*							
Charge for Fully Depreciated Assets		6,000						
Depreciation for the Year						4,000		
Balance								23,000*
Prepaid Insurance	850							
Payments					2,300			
Amount Expired						1,600		
Unexpired								1,550
Advertising	2,500							
Payments					3,000			
Charged to Expense						5 500		
Total Assets.	$316,750							$234,130
LIABILITIES								
Bonds Payable	$ 50,000							
Bonds Retired at a Discount					4,850		150	
Balance								$ 45,000
Notes Payable—Old	35,000				35,000			
Interest on Notes Payable	270				270			
Accrued during the Year					150	150		
Accounts Payable—Old	105,000							
Payment and Discounts Taken					103,850		1,150	
Accounts Payable—New—for Purchases			95,000					
Payments and Discounts Taken					45,000		800	
Notes given in Settlement		25,000						
Balance								24,200
Forward	$190,270	$165 200	$140,200	$354,770	$197,920	$137,000	$306,950	$ 69,200

Statement of Realization, Liquidation, and Operations—(*Continued*)

	Balances, December 31, 1933	Miscellaneous		Cash		Profit and Loss		Balances, December 31, 1934
		Charges	Credits	Receipts	Payments	Charges	Credits	
Forward	$190,270	$165,200	$140,200	$354,770	$197,920	$137,000	$306,950	$ 69,200
Notes Payable—Given on Account			25,000					25,000
Accrued Interest on Notes Payable						120		120
Direct Labor	900				75,000	75,200		1,100
Indirect Labor					6,500	6,500		
Manufacturing Expenses					18,300	18,300		
Salesmen's Salaries					35,000	35,800		800
Office Salaries	600				8,100	7,500		
General Expenses					3,600	3,600		
Receiver's Charges					5,000	5,000		
Total Liabilities	$191,770							$ 96,220
Net Worth								
James Martin, Capital	$ 61,900							
Net Profit—One half						8,965		
Drawings					2,500			
Balance, December 31, 1934								$ 68,365
Frank Duncan, Capital	63,080							
Net Profit—One half						8,965		
Drawings					2,500			
Balance, December 31, 1934								69,545
Total Net Worth	$124,980	$165,200	$165,200	$354,770	$354,420	$306,950	$306,950	$137,910

CHAPTER 42

HOME OFFICE AND BRANCH ACCOUNTING—COMBINED STATEMENTS

Agencies and branches.—Although agencies and branches differ in several particulars, the two words are often used indiscriminately. Agencies and branches both are means of projecting the sales organization into territory at a distance from the home office, and setting up a permanent sales establishment in the buyers' territory, but aside from this common feature, the agency and the branch differ very widely in organization, management, and control. The points of difference may be summarized as follows:

Agency	Branch
Carries a line of samples for inspection, but does not carry a full stock for making deliveries to customers. Orders are sent to the home office and deliveries are made by the home office.	Carries a stock of merchandise, most of which is usually obtained from the home office, but part of which may be purchased from outsiders. Deliveries are made from the branch stock.
Credits passed on by the home office; accounts receivable carried on the home office books; collections made by the home office.	Credits passed on by the branch; accounts receivable carried on the branch books; collections made by the branch.
Working fund for agency expenses provided by the home office, and replenished by the home office when exhausted. No other cash handled by the agency.	Receipts from sales and collections deposited in local bank to the credit of the branch; checks for expenses drawn by the branch manager.

It is evident from this summary that an agency exercises about the same functions as a traveling salesman, while the branch exercises most of the functions of an independent business, subject only to the supervision and control of the home office.

The foregoing summary is descriptive of the true agency and the true branch, but extensions may be made whereby the agency is vested with some of the powers of a branch. For instance, the agency may carry a stock of merchandise and make deliveries, although credits are passed on by the home office, and the accounts receivable are carried on the home office books.

On the other hand, some restrictions may be placed on a branch. For instance, although the branch may be allowed to pass on its own credits, the accounts may be carried on the home office books. A very common restriction has to do with cash The branch manager may be required to deposit all receipts from sales and all collections in a bank account in the name of the home office, subject to check by the home office only; a working fund for expenses is then provided from the home office by a deposit in a separate bank account which may be drawn against by the branch manager, and which is replenished by another check from the home office.

Thus it appears that while there are true agencies and true branches, other establishments exist having some of the characteristics of both—agencies exercising some of the functions of branches, and branches subject to some of the restrictions which apply to agencies. It is neither possible nor necessary to consider here all of the variations from the true agency and the true branch. The accounting methods used by the typical agency and the typical branch will be illustrated, since it is understood that, if an agency exercises some of the functions of a branch, or if a branch is subject to some restrictions which usually apply only to agencies, their accounting systems will necessarily be modified to suit the conditions.

Agency accounts.—An agency does not need to keep a double entry system of accounts. All that is necessary is a cash book in which to record money received from the home office for its working fund, and the disbursements made

therefrom for expenses. The disbursement record is usually kept in duplicate. When the working fund runs low and a replenishing check is desired, one copy of the disbursement sheet is sent to the home office, together with the vouchers, as evidence of the nature and propriety of the disbursements, and the other copy is retained by the agency. A memorandum record of sales may be made, but no postings are made from it, and no ledger is kept at the agency.

The home office, on the other hand, must keep its records in such a manner as to show:

(1) The merchandise sent to the agency for sample purposes
(2) The cash sent to the agency for the establishment of the working fund.
(3) The sales made by the agency.
(4) The cost of goods sold by the agency.
(5) The expenses of the agency.
(6) The profits of the agency.

The following illustration shows how these records are kept on the home office books; it is understood that the agency keeps only a cash book.

(1) Samples to the value of $1,000.00 sent to the agency:

Agency Samples	1,000 00	
Purchases		1,000 00

(2) Working fund of $500 00 established:

Agency Working Fund	500 00	
Cash		500 00

(3) Sales of $10,000 00 reported by the agency and delivered by the home office.

Accounts Receivable	10,000 00	
Agency Sales		10,000 00

Collections of accounts receivable arising from agency sales are recorded in the usual way.

(4) Cost of agency sales, $7,000.00:

Cost of Agency Sales	7,000 00	
Purchases		7,000 00

This entry may be made at the end of the period for the total cost of sales, but a memorandum record must be kept during the period when sales orders are filled. This memorandum record will furnish the information for the above entry at the end of the period.

(5) When the agency reports its cash disbursements for expenses, the home office issues a check to the agency to replenish its working fund, and makes an entry similar to the following:

Agency Expenses (detailed as desired)	1,400 00	
Cash		1,400 00

(6) Entry to close the accounts showing agency profit:

Agency Sales	10,000 00	
Cost of Agency Sales		7,000 00
Agency Expenses		1,400 00
Profit and Loss		1,600 00

If it is not desired to keep the records in such a way as to show the profit of the agency as a separate amount, the agency sales may be credited to the regular Sales account, entry (4) for cost of sales may be omitted, and the expenses may be charged to the regular expense accounts.

Branch accounts.—The accounting for a branch is more complex. The branch keeps a complete set of books in which to record goods received from the home office and purchased from outsiders, sales, accounts receivable, accounts payable, and expenses. The ledger contains an account called Home Office Current, which is credited with everything received from the home office and charged with everything sent to the home office. The Home Office Current account is thus a proprietorship account, showing the investment made by the home office in the branch. When the branch closes its books, a net profit is transferred from Profit and Loss to the Home Office Current account, as an increase in the investment, while a net loss is closed to the debit of the Home Office Current account.

The methods used by the home office depend, to some extent, on the price at which goods are billed to the branch. Three illustrations are therefore given, dealing with the three typical methods of billing:

(1) Goods billed to the branch at cost.
This is the usual method and the simplest one.

(2) Goods billed to the branch at an arbitrary value between cost and selling price.
This method is sometimes used in order to keep the branch manager in ignorance of the cost of goods sold and hence of the profits of the branch.

(3) Goods billed to the branch at selling price.
This method is based on the theory that if the branch charges its merchandise accounts with the selling price of goods received and credits its merchandise accounts with sales at the same price, the net balance of the merchandise accounts on the books of the branch should represent the selling price of the goods on hand. In other words, this method is supposed to provide a perpetual inventory of branch merchandise at selling price, and thus furnish a check on the goods, which will prevent or detect carelessness or fraud The method works well unless frequent changes are made in selling prices, if selling prices fluctuate frequently, it is necessary to make so many adjustments that the work involved usually outweighs the advantages.

First illustration: SHIPMENTS AT COST.—Assume the following transactions:

(1) Cash sent to the branch, $500.00.
(2) Merchandise sent to the branch, $5,000 00
(3) Merchandise purchased by the branch from outsiders on account, $1,000.00
(4) Sales by branch.

Cash	$2,000 00
On account	$5,000 00.

(5) Collections from accounts receivable, $4,200.00
(6) Payments to accounts payable, $750.00.
(7) Expenses paid, $1,200.00.
(8) Cash sent to home office, $4,000 00

The following journal entries show the accounts debited and credited by the home office and the branch·

	Branch Books			Home Office Books		
(1)	Cash	500		Branch Current	500	
	Home Office Current		500	Cash		500
(2)	Mdse from H O	5,000		Branch Current	5,000	
	Home Office Current		5,000	Shipments to Branch (to be closed to Purchases)		5,000
(3)	Purchases	1,000				
	Accounts Pay		1,000			
(4)	Cash	2,000				
	Accounts Receivable	5,000				
	Sales		7,000			
(5)	Cash	4,200				
	Accounts Rec		4,200			
(6)	Accounts Payable	750				
	Cash		750			
(7)	Expenses	1,200				
	Cash		1,200			
(8)	H. O Current	4,000		Cash	4,000	
	Cash.		4,000	Branch Current		4,000

The branch is now ready to close its books. Assuming that its inventory is $1,500 00, the closing entries on the branch books are:

Profit and Loss	7,200 00	
Merchandise from Home Office		5,000 00
Purchases		1,000 00
Expenses		1,200 00
Inventory	1,500 00	
Sales	7,000 00	
Profit and Loss		8,500 00
Profit and Loss	1,300 00	
Home Office Current		1,300.00

After closing its books, the branch draws off the following balance sheet:

Branch Balance Sheet

Cash	$ 750 00	Accounts Payable	$ 250 00
Accounts Receivable	800 00	Home Office Current	2,800 00
Inventory	1,500 00		
	$3,050 00		$3,050 00

The home office takes up the profit by the following entry.

Branch Current Account	1,300 00	
Branch Profit and Loss.		1,300 00

The Branch Current account on the home office books now appears as follows:

Branch Current

Cash (sent to branch)	500 00	Cash (received from branch)	4 000 00
Merchandise (sent to branch)	5,000 00	Balance	2,800 00
Net Profit of Branch	1,300 00		
	6,800 00		6,800 00
Balance—down	2,800 00		

Combined statements.—At the end of the period, statements should be made combining the profit and loss statements of the branch and the home office, and the balance sheets of the branch and the home office. Using assumed figures for the home office, these statements are illustrated below:

THE *X Y* COMPANY
Profit and Loss Statement
For the Year Ended December 31, 1933

	Branch		Home Office		Total	
Sales		$7,000		$18,000		$25,000
Less Cost of Goods Sold						
Inventory—January 1			$ 4,000		$ 4,000	
Purchases and Shipments from Home Office	$6,000		13,000		19,000	
Total	$6,000		$17,000		$23,000	
Inventory—December 31	1,500	4,500	5,000	12,000	6,500	16,500
Gross Profit on Sales		$2,500		$ 6,000		$ 8,500
Less Expenses		1,200		2,700		3,900
Net Profit		$1,300		$ 3,300		$ 4,600

THE *X Y* COMPANY
Balance Sheet
December 31, 1933

Assets		Liabilities	
Cash	$ 3,950 00	Accounts Payable	1,650 00
Accounts Receivable	3,700 00	Capital Stock	$ 7,500 00
Inventory	6,500 00	Surplus	5,000 00
	$14,150 00		$14,150 00

This balance sheet was prepared from the following working papers, in which similar assets and liabilities are combined, and the reciprocal current accounts are eliminated.

Combined Balance Sheet Working Papers
December 31, 1933

	Home Office	Branch	Elimina-tions	Balance Sheet
Assets				
Cash	3,200 00	750 00		3,950 00
Accounts Receivable	2,900 00	800 00		3,700 00
Inventory	5,000 00	1,500 00		6,500 00
Branch Current	2,800 00		2,800 00	
	13,900 00	3,050 00	2,800 00	14,150 00
Liabilities				
Accounts Payable	1,400.00	250 00		1,650 00
Home Office Current		2 800 00	2,800 00	
Capital Stock	7,500 00			7,500 00
Surplus	5,000 00			5,000 00
	13,900 00	3,050 00	2,800 00	14,150 00

Second illustration. SHIPMENTS AT ARBITRARY VALUE.—In this illustration it is assumed that the home office bills all goods to the branch at 10% above cost, in order to keep the branch manager uninformed concerning the true profits of the branch. The following transactions are recorded:

(1) Cash sent to branch, $500 00
(2) Merchandise sent to branch, cost $5,000 00, billed at $5,500 00
(3) Branch sales (all for cash) $6,000.00.
(4) Expenses paid, $1,200 00
(5) Cash sent to home office, $4,000 00
The branch inventory at the end of the period is $1,650.00, at billed prices.

	Branch Books			Home Office Books		
(1)	Cash	500		Branch Current	500	
	Home Office Current		500	Cash..		500
(2)	Mdse from H O	5,500		Branch Current	5,500	
	Home Office Current		5,500	Shipments to Branch		5,500
(3)	Cash	6,000				
	Sales		6,000			
(4)	Expense	1,200				
	Cash		1,200			
(5)	Home Office Current	4,000		Cash	4,000	
	Cash ...		4,000	Branch Current		4,000

Closing Entries

Profit and Loss	6,700				
Mdse from H O		5,500			
Expense		1,200			
Inventory	1,650				
Sales	6,000				
Profit and Loss		7,650			
Profit and Loss	950		Branch Current	950	
H O Current		950	Branch Profit & Loss		950
			Shipments to Branch	5,500	
			Purchases		5,000
			Branch Profit & Loss		350
			Reserve for Unrealized Profit in Branch Inventory ..		150

These illustrative entries show that the practice of billing at an arbitrary figure above cost does not affect the accounting methods or the books of the branch in any way except that the Profit and Loss account does not show the true profit of the branch.

The home office books are kept in the same manner as in the first illustration, the only difference being in the entry closing out the Shipments to Branch account. The Purchases account is credited with the cost of the goods shipped to the branch, \$5,000.00; the Branch Profit and Loss account is credited with the 10% profit realized by the sale of goods costing \$3,500.00; and a reserve is credited with \$150 00, the 10% unrealized profit on the goods in the branch inventory, which cost \$1,500 00 and which are inventoried by the branch at the billed price of \$1,650 00.

This reserve is deducted from the inventory, as shown in the following working papers.

Combined Balance Sheet Working Papers

	Home Office	Branch	Eliminations	Balance Sheet
Assets				
Cash	3,500 00	1,300 00		4,800 00
Accounts Receivable	2,950 00			2,950 00
Inventory	6,800 00	1,650 00	150 00	8,300 00
Branch Current	2,950 00		2,950 00	
	16,200 00	2,950 00	3,100 00	16,050 00

	Home Office	Branch	Elimina-tions	Balance Sheet
Liabilities				
Accounts Payable	2,000 00			2,000 00
Reserve for Unrealized Profit in Inventory	150 00		150 00	
Home Office Current		2,950 00	2,950 00	
Capital Stock	10,000 00			10,000 00
Surplus	4,050 00			4,050 00
	16,200 00	2,950 00	3,100 00	16,050 00

Third illustration: SHIPMENTS AT SELLING PRICE.—In this illustration it is assumed that the home office bills all goods to the branch at selling price, to keep the branch manager uninformed as to the profits of the branch, and also to maintain a control over the branch merchandise. This control is based on the fact that the debits to Merchandise from Home Office, on the branch books, minus the credits to Sales, on the branch books, should equal the inventory at the branch at selling prices. The following transactions are recorded:

(1) Cash sent to branch, $500.00.
(2) Merchandise sent to branch, cost $5,000.00, selling price $7,500.00. (While the total selling price is 150% of the cost, it must not be assumed that this rate applies to each commodity, as there may be different rates of mark-up.)
(3) Branch sales, all for cash, $6,000 00.
(4) Expenses paid, $1,200 00.
(5) Cash sent to home office, $4,000.00.
The inventory at the branch at the end of the period is valued at selling prices totaling $1,400.00. Therefore goods marked to sell at $100.00 are unaccounted for ($7,500.00 shipments minus $6,000 00 sales, should leave an inventory of $1,500 00 instead of $1,400.00)

Branch Books			Home Office Books		
(1) Cash	500		Branch Current	500	
Home Office Current		500	Cash		500
(2) Mdse from H O	7,500		Branch Current	7,500	
H O Current		7,500	Shipments to Branch		7,500

A memorandum record of the cost of the goods should be kept in the Shipments account, the credit side of which would appear as follows

Shipments to Branch

		Cost	Selling Price
	Date	5,000 00	7,500.00

Branch Books			Home Office Books		
(3) Cash	6,000				
Sales.		6,000			
(4) Expense	1,200				
Cash		1,200			
(5) H O Current	4,000		Cash	4,000	
Cash		4,000	Branch Current		4,000

When the branch closes its books, there is no object in setting up a Profit and Loss account, because no profit can possibly be shown. The following entry is sufficient to effect the closing:

Sales	6,000	
Inventory	1,400	
H O Current	1,300	
Mdse from H O		7,500
Expense . . .		1,200

The charge to the Home Office Current account is the sum of the expenses and the $100.00 merchandise shortage.

The home office takes up the apparent, or book, loss shown by the branch books, as follows:

Branch Profit & Loss	1,300	
Branch Current .		1,300

The branch inventory is sent to the home office, and all items are repriced at cost (or market, if lower than cost). Assuming that the cost of the inventory (selling price $1,400 00) is found to be $975.00, a reserve must be set up for the $425.00 unrealized profit in the inventory, and the remaining profit of $2,075.00 ($2,500.00 profit added to shipments minus $425 00 unrealized profit) may be credited to Branch Profit and Loss, because it has been realized by branch sales.

Shipments to Branch	7,500	
Purchases		5,000
Reserve for Unrealized Profit in Branch Inventory		425
Branch Profit & Loss . . .		2,075

The Branch Profit and Loss account on the home office books now stands:

Credited with profits realized by branch sales	$2,075 00
Debited with book loss, per branch books	1,300 00
Net credit, or branch profit	$ 775 00

This is the true branch profit, as shown by the following profit and loss statement:

Branch Sales		$6,000 00
Less Cost of Goods Sold.		
Shipments—at cost	$5,000 00	
Less Inventory—at cost	975 00	4,025 00
Gross Profit on Sales		$1,975.00
Less Expense		1,200 00
Net Profit		$ 775 00

The reserve for unrealized profit in the branch inventory is deducted from the inventory in the working papers for the combined balance sheet, in the same manner as shown in the illustration on page 190.

Fixed assets.—The fixed assets of a branch are usually carried on the home office books. If this method is followed, a purchase of fixed assets by the home office for the branch is recorded on the home office books by a debit to Branch Furniture and Fixtures (or other fixed asset account) and a credit to Cash. No entries will appear on the branch books. If the fixed assets are purchased by the branch, the entry on the branch books debits the Home Office Current account and credits Cash. The branch will report the purchase to the home office, which will debit Branch Furniture and Fixtures (or other fixed asset account) and credit Branch Current account.

Branch expenses on home office books.—Some expenses applicable to the branch operations may appear on the home office books instead of on the branch books. For instance, if the fixed assets are carried on the home office books, the depreciation will be provided on these books. After taking up the profit as shown by the branch, the home office should make an entry on its books debiting Branch Profit and Loss and crediting the Reserve for Depreciation. If any of the home office expenses are to be apportioned in part to the branch, entries may be made debiting the Branch Profit and Loss account and crediting the expense accounts. The bal-

ance of the Branch Profit and Loss account will then represent the net profit of the branch, and this balance will be transferred to the general Profit and Loss account.

Reconciliation of reciprocal accounts.—The Branch Current account on the home office books, and the Home Office Current account on the branch books, are supposed to be reciprocal, but in actual practice this condition rarely exists, because entries made by the home office for remittances of cash and shipments of merchandise are not taken up on the branch books until some time later, when the cash and merchandise are received; and because entries on the branch books for cash remitted to the home office may not be taken up by the home office for several days, while the cash is in transit.

At closing time, therefore, it is necessary to make adjustments to bring the two current accounts into agreement. Any shipments made by the home office and not received by the branch at the closing date, should be taken up on the branch books by a debit to Merchandise in Transit and a credit to Home Office Current. This merchandise in transit should be included in the inventory. Any remittances made by the branch and not received by the home office at the closing date, should be taken up on the home office books by debiting Cash in Transit and crediting the Branch Current account. Other necessary adjustments should be made in a similar manner

Interbranch transfers.—If merchandise is shipped from one branch to another, or if other assets are transferred between branches, the branch parting with the asset should debit the Home Office Current account and credit the asset. The branch receiving it should debit the asset and credit its Home Office Current account. The home office should debit the current account of the branch receiving the asset, and credit the current account of the branch parting with the asset. No branch should carry an account with any other branch; all interbranch transfers should be cleared through the home office current accounts.

Freight.—Freight on goods received by the branch can properly be included in the branch inventory, on the basis

of the same principles which apply to freight in. But if goods are shipped from one branch to another, the branch receiving the goods should include in the inventory valuation only such an amount of freight as would have been paid if the goods had been shipped directly from the home office Any excess freight should be charged off as an expense.

To illustrate, assume that $500.00 worth of goods are shipped from the home office to Branch *A* at a freight cost of $25.00. These goods are reshipped by Branch *A* to Branch *B* at an additional freight cost of $20.00, which is paid by Branch *A*. If the goods had been shipped from the home office to Branch *B*, the freight cost would have been $30.00. The entries on the various books should be:

For shipment to Branch *A*:

Home Office	Branch *A*	525 00	
	Shipments to Branch *A*		500.00
	Cash		25 00
Branch *A*.	Merchandise from Home Office	500 00	
	Freight In	25 00	
	Home Office Current		525 00

For shipment from Branch *A* to Branch *B*:

Branch *A*:	Home Office Current	525 00	
	Merchandise from Home Office		500 00
	Freight In .		25 00
	Home Office Current	20 00	
	Cash .		20 00
Branch *B*	Merchandise from Home Office	500 00	
	Freight In	30 00	
	Home Office Current		530 00
Home Office.	Shipments to Branch *A* .	500 00	
	Shipments to Branch *B*		500 00
	Branch *B* Current	530 00	
	Interbranch Excess Freight	15 00	
	Branch *A* Current...... . .		545.00

CHAPTER 43

PARENT AND SUBSIDIARY ACCOUNTING—CONSOLIDATED BALANCE SHEETS AT DATE OF ACQUISITION

Investments in branches and subsidiaries.—Let us assume that Company P established an unincorporated branch, with an investment of $10,000.00 in cash and $20,000.00 in merchandise. The following combined balance sheet working papers were prepared immediately after the establishment of the branch.

COMPANY P AND BRANCH S
Combined Balance Sheet Working Papers
July 31, 1933

	Company P	Branch S	Eliminations	Combined Balance Sheet
Assets				
Cash	25,000 00	10,000 00		35,000 00
Merchandise Inventory	60,000 00	20,000 00		80,000 00
Accounts Receivable	35,000 00			35,000 00
Branch Current	30,000 00		30,000 00	
	150,000 00	30,000 00	30,000 00	150,000 00
Liabilities and Net Worth				
Accounts Payable	40,000 00			40,000 00
Home Office Current		30,000 00	30,000 00	
Capital Stock	100,000 00			100,000 00
Surplus	10,000 00			10,000 00
	150,000 00	30,000 00	30,000 00	150,000 00

In these working papers, the balances of the two reciprocal Current accounts are eliminated because they represent mere interrelationships between the home office and the branch.

Let us now assume that Branch S was incorporated as a separate company on July 31, 1933, and issued $30,000.00 of capital stock to Company P for the cash and merchandise received. Company P is a parent company, or holding company; Company S is a subsidiary.

Although the two companies are separate corporate entities, they constitute a single business organization, and a consolidated balance sheet should be prepared to show their

combined assets and liabilities. The working papers for the consolidation of the balance sheets of this parent company and its subsidiary are similar to those of a home office and branch, except for the change in the names of the reciprocal accounts.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
July 31, 1933

	Company *P*	Company *S*	Intercompany Eliminations	Consolidated Balance Sheet
Assets				
Cash	25,000	10,000		35,000
Merchandise Inventory	60,000	20,000		80,000
Accounts Receivable	35,000			35,000
Investment in Stock of Company *S*	30,000		30,000	
	150,000	30,000	30,000	150,000
Liabilities and Net Worth				
Accounts Payable	40,000			40,000
Capital Stock				
Company *P*	100,000			100,000
Company *S*		30,000	30,000	
Surplus	10,000			10,000
	150,000	30,000	30,000	150,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
July 31, 1933

Assets		Liabilities and Net Worth		
Cash	$ 35,000	Accounts Payable		$ 40,000
Inventory	80,000	Net Worth		
Accounts Receivable	35,000	Capital Stock	$100,000	
		Surplus	10,000	110,000
	$150,000			$150,000

Intercompany eliminations.—The elimination of intercompany accounts in the foregoing working papers may be expressed by the following rule:

Elimination of reciprocals.
  Subsidiary's Capital Stock account.
  Parent company's Investment account.

Purposes of the consolidated balance sheet.—The consolidated balance sheet of a parent and subsidiary serves two purposes, namely:

First: The parent company and its subsidiary, although legally separate entities, constitute a single business organization. Each company's balance sheet shows its own assets and liabilities, but a consolidated balance sheet is required if it is desired to show the total assets and liabilities of the combined organization.

Second: A balance sheet of the parent company alone, showing the balance of the subsidiary stock investment account, does not provide a comprehensive picture of the parent company's financial condition. The value of the investment in the subsidiary stock is dependent upon the value of the assets and the amount of the liabilities of the subsidiary; the financial condition of the parent company is therefore more adequately presented by a consolidated balance sheet in which the underlying assets and liabilities are substituted for the subsidiary stock investment.

Subsidiary surplus or deficit.—Let us now assume that a company which has been in operation for some time has net assets of \$65,000.00, represented by capital stock of \$50,000.00 and surplus of \$15,000.00. Its stock is acquired by another corporation at book value, \$65,000 00. The reciprocal balances on the books of the two companies are.

On parent company's books:

Investment in Stock of Company *S* (debit)		\$65,000 00

On subsidiary's books·

Capital Stock (credit)	\$50,000 00	
Surplus (credit)	15,000.00	\$65,000 00

Obviously, the elimination of reciprocal balances will not be complete unless the subsidiary's surplus, as well as its capital stock, is eliminated.

Or let us assume that a company has net assets of \$45,000.00, represented by capital stock of \$60,000 00 and a deficit of \$15,000.00. Its stock is acquired by another corporation at book value, \$45,000.00. The reciprocal balances on the books of the two companies are.

On parent company's books:

Investment in Stock of Company S (debit).		\$45,000 00

On subsidiary's books:

Capital Stock (credit)	\$60,000 00	
Less Deficit (debit)	15,000 00	\$45,000 00

Again it is obvious that the elimination of reciprocals will require the elimination of the subsidiary's deficit as well as its capital stock.

We must therefore modify our original rule for the elimination of intercompany balances by the addition of the words shown below in italics:

Elimination of reciprocals:
  Subsidiary's Capital Stock *and Surplus or Deficit accounts.*
  Parent company's Investment account.

Two illustrations are given involving a subsidiary surplus or deficit.

First illustration. SUBSIDIARY SURPLUS.—The following working papers show the elimination of a subsidiary's Capital Stock and Surplus accounts, which (together) are reciprocal to the Investment account:

COMPANY P AND SUBSIDIARY S
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company S.	65,000		65,000	
Cash . .	20,000	70,000		90,000
	85,000	70,000	65,000	90,000
Liabilities and Net Worth				
Accounts Payable	10,000	5,000		15,000
Capital Stock				
Company P .	75,000			75,000
Company S		50,000	50,000	
Surplus				
Company S		15,000	15,000	
	85,000	70,000	65,000	90,000

Second illustration Subsidiary deficit.—The following working papers show the elimination of a subsidiary's Capital Stock and Deficit accounts, which (net) are reciprocal to the Investment account:

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company *S*.	45,000		45,000	
Cash	35,000	55,000		90,000
	80,000	55,000	45,000	90,000
Liabilities and Net Worth				
Accounts Payable	20,000	10,000		30,000
Capital Stock				
Company *P*	50,000			50,000
Company *S*		60,000	60,000	
Surplus (Deficit*)				
Company *P*	10,000			10,000
Company *S*		15,000*	15,000*	
	80,000	55,000	45,000	90,000

Minority interest.—If the parent company acquires less than 100% of the stock of the subsidiary, it shares the ownership of the subsidiary with the outsiders whose stock it does not purchase. These outsiders are called the minority stockholders of the subsidiary. The Capital Stock and Surplus (or Deficit) accounts of the subsidiary then include two elements.

The holding company's percentage of the subsidiary stock and surplus (or deficit). These items are reciprocal to the parent company's Investment account, and should therefore be eliminated.

The minority stockholders' interest in the subsidiary stock and surplus (or deficit). These items are not reciprocal to any balances on the parent company's books, and are therefore carried to the consolidated balance sheet.

We must therefore again modify our original rule for the elimination of intercompany balances, by the addition of the words shown below in italics:

Elimination of reciprocals
- Subsidiary's Capital Stock and Surplus or Deficit accounts.
  - *Eliminate reciprocal element—parent company's proportion.*
  - *Extend non-reciprocal element (minority interest) to Consolidated Balance Sheet column.*
- Parent company's Investment account.

Three illustrations are given involving a minority interest in the subsidiary.

First illustration NO SUBSIDIARY SURPLUS OR DEFICIT.—In this illustration it is assumed that the subsidiary had a capital stock of \$50,000 00 and no surplus or deficit at the date when the parent company acquired 90% of its stock at book value, \$45,000 00.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Cash	65,000	60,000		125,000
Investment in Stock of Company *S*.	45,000		45,000	
	110,000	60,000	45,000	125,000
Liabilities and Net Worth				
Accounts Payable	20,000	10,000		30,000
Capital Stock.				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%				5,000M
Surplus—Company *P*	15,000			15,000
	110,000	60,000	45,000	125,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Assets		Liabilities and Net Worth	
Cash	\$125,000	Accounts Payable	\$ 30,000
		Minority Interest—Company *S* (10%).	5,000
		Capital Stock	75,000
		Surplus	15,000
	\$125,000		\$125,000

Second illustration: SUBSIDIARY SURPLUS.—In this illustration it is assumed that the subsidiary had a capital stock of $50,000.00 and a surplus of $10,000 00, making a total net worth of $60,000.00, at the date when the parent company acquired 90% of its stock at book value, $54,000.00.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company *S*	54,000		54,000	
Cash	46,000	75,000		121,000
	100,000	75,000	54,000	121,000
Liabilities and Net Worth				
Accounts Payable	10,000	15,000		25,000
Capital Stock				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%				5,000M
Surplus				
Company *P*	15,000			15,000S
Company *S*		10,000		
Eliminate Parent Company's 90%			9,000	
Minority Interest—10%				1,000M
	100,000	75,000	54,000	121,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Assets		**Liabilities and Net Worth**		
Cash	$121,000	Accounts Payable		$ 25,000
		Minority Interest in Company *S* (10%)		
		Capital Stock	$ 5,000	
		Surplus	1,000	6,000
		Capital		
		Capital Stock	$75,000	
		Surplus	15,000	90,000
	$121,000			$121,000

The minority interest may be shown in one amount, without detailing the capital stock and surplus, as shown in the illustration on the following page.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

(Date of Acquisition)

Assets		Liabilities and Net Worth		
Cash	$121,000	Accounts Payable		$ 25,000
		Minority Interest in Co *S* (10%)		6,000
		Capital		
		Capital Stock	$75,000	
		Surplus	15,000	90,000
	$121,000			$121,000

Third illustration: SUBSIDIARY DEFICIT.—The subsidiary had a capital stock of $50,000 00 and a deficit of $10,000 00, or a net worth of $40,000 00, at the date when the parent company acquired 90% of its stock at book value, $36,000.00.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet Working Papers

(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company *S*	36,000		36,000	
Cash	64,000	55,000		119,000
	100,000	55,000	36,000	119,000
Liabilities and Net Worth				
Accounts Payable . .	10,000	15,000		25,000
Capital Stock				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10% .				5,000M
Surplus (Deficit*)				
Company *P*	15,000			15,000S
Company *S*		10,000*		
Eliminate Parent Company's 90%			9,000*	
Minority Interest—10% .				1,000*M
	100,000	55,000	36,000	119,000

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

(Date of Acquisition)

Assets		Liabilities and Net Worth		
Cash	$119,000	Accounts Payable		$ 25,000
		Minority Interest in Company *S* (10%)		4,000
		Capital		
		Capital Stock	$75,000	
		Surplus	15,000	90,000
	$119,000			$119,000

Goodwill.—If one company buys the assets and liabilities of another company (instead of its stock), any payment in excess of the value of the net assets acquired is regarded as goodwill. Similarly, if one company acquires control of another company by purchasing its stock, any payment in excess of the book value of the stock acquired may be regarded as a payment for goodwill.

Therefore, if the stock of a subsidiary is purchased at a price in excess of its book value, the balance of the Investment account on the parent company's books will consist of two elements:

(1) The book value of the stock acquired.
(2) The excess payment, or goodwill

To illustrate, assume that a company paid \$65,000.00 for all of the stock of a subsidiary which had a capital stock of \$50,000.00 and a surplus of \$10,000 00. The balance of the Investment account consists of the following elements:

\$60,000.00—representing the book value of the stock acquired. This element is reciprocal to, and is eliminated against, the Capital Stock and Surplus accounts of the subsidiary.

\$5,000.00—representing a payment for goodwill. This element is not reciprocal to any balance on the subsidiary's books and therefore is not eliminated, but is extended to the Consolidated Balance Sheet column, and is shown in the consolidated balance sheet as goodwill, either as a separate item or added to the goodwill on the books of the parent or subsidiary.

It therefore becomes necessary again to modify our rule for the elimination of intercompany accounts, by adding the words shown below in italics.

Elimination of reciprocals:

Subsidiary's Capital Stock and Surplus or Deficit accounts.

Eliminate reciprocal element—parent company's proportion.

Extend non-reciprocal element (minority interest) to Consolidated Balance Sheet column

Parent company's Investment account:

Eliminate reciprocal element—parent company's proportion of subsidiary's stock and surplus.

Extend non-reciprocal element (goodwill) to the Consolidated Balance Sheet column.

Three illustrations involving goodwill are presented, they differ in the percentage of stock ownership by the parent company and in the matter of the existence of a surplus or deficit on the books of the subsidiary.

First illustration.—At the date of acquisition, the subsidiary has a capital stock of \$50,000.00 and no surplus or deficit. The parent company acquires all of the stock, paying \$57,000.00 therefor.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet Working Papers

(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company *S* (100%)	57,000			
Eliminate Book Value				
Capital Stock			50,000	
Goodwill				7,000G
Cash	43,000	60,000		103,000
	100,000	60,000	50,000	110,000
Liabilities and Net Worth				
Accounts Payable	10,000	10,000		20,000
Capital Stock				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 100%			50,000	
Surplus—Company *P*	15,000			15,000
	100,000	60,000	50,000	110,000

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

(Date of Acquisition)

Cash	\$103,000	Accounts Payable		\$ 20,000
Goodwill	7,000	Capital		
		Capital Stock	\$75,000	
		Surplus	15,000	90,000
	\$110,000			\$110,000

Second illustration.—At the date of acquisition, the subsidiary has a capital stock of $50,000.00 and a surplus of $10,000.00, making a total book value of $60,000.00. The parent company acquires a 90% interest, the book value of which is $54,000 00 and the purchase price $57,000.00. Hence there is a goodwill element of $3,000.00 in the price paid by the parent company for its 90% interest in the subsidiary stock.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company *S* (90%)	57,000			
Eliminate Book Value				
Capital Stock 90% of $50,000 00			45,000	
Surplus 90% of $10,000 00			9,000	
Goodwill				3,000G
Cash	43,000	75,000		118,000
	100,000	75,000	54,000	121,000
Liabilities and Net Worth				
Accounts Payable	10,000	15,000		25,000
Capital Stock				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%				5,000M
Surplus				
Company *P*	15,000			15,000
Company *S*		10,000		
Eliminate Parent Company's 90%			9,000	
Minority Interest—10%				1,000M
	100,000	75,000	54,000	121,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Cash	$118,000	Accounts Payable		$ 25,000
Goodwill	3,000	Minority Interest—Company *S* (10%)		6,000
		Capital		
		Capital Stock	$75,000	
		Surplus	15,000	90,000
	$121,000			$121,000

Third illustration.—At the date of acquisition, the subsidiary has a capital stock of \$50,000.00 and a deficit of \$10,000.00, making a net book value of \$40,000.00. The parent company acquires a 90% interest, the book value of which is \$36,000 00, and the purchase price \$38,000.00 Hence there is a goodwill element of \$2,000.00 in the purchase price.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Co. *S* (90%)	38,000			
Eliminate Book Value				
Capital Stock. 90% of \$50,000 00			45,000	
Less Deficit 90% of \$10,000 00			9,000*	
Goodwill				2,000G
Cash	62,000	55,000		117,000
	100,000	55,000	36,000	119,000
Liabilities and Net Worth				
Accounts Payable	10,000	15,000		25,000
Capital Stock:				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%				5,000M
Surplus (Deficit*)				
Company *P*	15,000			15,000S
Company *S*		10,000*		
Eliminate Parent Company's 90%			9,000*	
Minority Interest—10%				1,000*M
	100,000	55,000	36,000	119,000

* Indicates a deduction

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Cash	\$117,000	Accounts Payable		\$ 25,000
Goodwill. .	2,000	Minority Interest—Company *S* (10%)		4,000
		Capital		
		Capital Stock	\$75,000	
		Surplus. .	15,000	90,000
	\$119,000			\$119,000

Deduction from goodwill.—If the subsidiary has a Goodwill account on its books at the date when the parent company acquires its stock interest, and if the parent company pays less than book value for the stock, the presumption is that the parent company does not recognize the subsidiary's goodwill as conservatively valued and is therefore unwilling to pay book value for the stock. Therefore, when the purchase price is less than the book value of the acquired stock, the deficiency in price should be deducted from the goodwill appearing on the subsidiary's books

For example, if the subsidiary has a capital stock of \$100,000.00 and a surplus of \$50,000 00, or a total net worth of \$150,000.00, of which \$10,000.00 is represented by a Goodwill account, and if the parent company acquires all of the stock of this subsidiary at a cost of \$142,000.00, it appears that the parent company refused to recognize the existence of a goodwill of \$10,000.00, but based its purchase price on a goodwill of \$2,000.00. In the consolidated working papers, the \$8,000 00 excess of the book value of the subsidiary stock over the purchase price, should be regarded as a deduction from the \$10,000 00 goodwill shown by the subsidiary books.

One more addition to our rule is therefore required:

Elimination of reciprocals.
- Subsidiary's Capital Stock and Surplus or Deficit accounts:
  - Eliminate reciprocal element—parent company's proportion.
  - Extend non-reciprocal element (minority interest) to Consolidated Balance Sheet column.
- Parent company's Investment account:
  - Eliminate reciprocal element—parent company's proportion of subsidiary's stock and surplus.
  - Extend non-reciprocal element (goodwill *or deduction from goodwill*) to the Consolidated Balance Sheet column.

Three illustrations involving deductions from goodwill are presented. In each case the subsidiary has a Goodwill account, and the parent company acquires the stock at less than its book value as reflected by the subsidiary's Capital Stock and Surplus accounts.

First illustration.—At the date of acquisition the subsidiary has a capital stock of $50,000.00 and no surplus or deficit. The parent company acquires all of the stock, paying $49,000 00 therefor, or $1,000.00 less than the book value.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Co *S* (100%)	49,000			
Eliminate Book Value.				
Capital Stock			50,000	
Deduction from Goodwill				1,000*G
Goodwill		3,000		3,000
Cash	51,000	57,000		108,000
	100,000	60,000	50,000	110,000
Liabilities and Net Worth				
Accounts Payable	15,000	10,000		25,000
Capital Stock				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 100%			50,000	
Surplus—Company *P*	10,000			10,000
	100,000	60,000	50,000	110,000

* Indicates a deduction

In the following consolidated balance sheet, the goodwill is shown as $2,000.00 (the $3,000.00 on the books of Company *S* minus the $1,000.00 negative element arising from the acquisition of Company *S* stock by Company *P*)

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Cash	$108,000	Accounts Payable		$ 25,000
Goodwill	2,000	Capital		
		Capital Stock	$75,000	
		Surplus	10,000	85,000
	$110,000			$110,000

Second illustration.—At the date of acquisition the subsidiary has a capital stock of $50,000.00 and a surplus of $10,000.00, making a total book value of $60,000.00. The

parent company acquires a 90% interest, the book value of which is $54,000.00 and the purchase price $53,000.00.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company *S* (90%)	53,000			
Eliminate Book Value.				
Capital Stock 90% of $50,000 00			45,000	
Surplus 90% of $10,000 00			9,000	
Deduction from Goodwill				1,000*G
Cash	47,000	72,000		119,000
Goodwill		3,000		3,000G
	100,000	75,000	54,000	121,000
Liabilities and Net Worth				
Accounts Payable	10,000	15,000		25,000
Capital Stock				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%				5,000M
Surplus:				
Company *P*	15,000			15,000
Company *S*		10,000		
Eliminate Parent Company's 90%			9,000	
Minority Interest—10%				1,000M
	100,000	75,000	54,000	121,000

* Indicates a deduction

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Cash	$119,000	Accounts Payable		$ 25,000
Goodwill	2,000	Minority Interest—Company *S* (10%)		6,000
		Capital		
		Capital Stock	$75,000	
		Surplus	15,000	90,000
	$121,000			$121,000

Third illustration.—At the date of acquisition the subsidiary has a capital stock of $50,000.00 and a deficit of $10,000.00, making a net book value of $40,000.00. The parent company acquires a 90% interest, the book value of which is $36,000.00 and the purchase price $35,000.00.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
(Date of Acquisition)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Co *S* (90%)	35,000			
Eliminate Book Value				
Capital Stock 90% of $50,000 00			45,000	
Deficit 90% of $10,000 00			9,000*	
Deduction from Goodwill				1,000*G
Cash	65,000	52,000		117,000
Goodwill		3,000		3,000G
	100,000	55,000	36,000	119,000
Liabilities and Net Worth				
Accounts Payable	10,000	15,000		25,000
Capital Stock.				
Company *P*	75,000			75,000
Company *S*		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%				5,000M
Surplus (Deficit*)				
Company *P*	15,000			15,000S
Company *S*		10,000*		
Eliminate Parent Company's 90%			9,000*	
Minority Interest—10%				1,000*M
	100,000	55,000	36,000	119,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
(Date of Acquisition)

Cash	$117,000	Accounts Payable		$ 25,000
Goodwill	2,000	Minority Interest—Company *S* (10%)		4,000
		Capital		
		Capital Stock	$75,000	
		Surplus	15,000	90,000
	$119,000			$119,000

In a subsequent chapter we shall consider the treatment of any excess of the book value of stock acquired over the purchase price, if no goodwill appears on the books of the subsidiary whose stock is acquired at less than book value.

Intercompany receivables and payables.—A consolidated balance sheet shows the financial condition of a group of companies with all intercompany relationships eliminated.

Related companies frequently buy from and sell to each other on credit, so that the accounts receivable of one company and the accounts payable of another company contain reciprocal intercompany accounts. The amounts of such reciprocal intercompany receivables and payables should be eliminated in the Eliminations column of the consolidated working papers, and the consolidated balance sheet should include only amounts receivable from and payable to others.

If the capital of one company is inadequate, one of the other related companies may make more or less permanent advances to it. The reciprocal accounts with these advances should also be eliminated in the consolidated working papers.

If the intercompany indebtedness takes the form of a note, the amount thereof should also be eliminated from the receivables and payables in the consolidated working papers.

The following partial working papers show the method of making such eliminations.

Consolidated Balance Sheet Working Papers

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Accounts Receivable.	165,000	60,000	12,000	213,000
Notes Receivable—Company *S*	25,000		25,000	
Liabilities				
Accounts Payable	90,000	30,000	12,000	108,000
Notes Payable—Company *P*		25,000	25,000	

Company *S* owes Company *P* $12,000 00 for merchandise; this amount is included in Company *P*'s accounts receivable (which total $165,000 00) and in Company *S*'s accounts payable (which total $30,000.00). The $12,000 00 is eliminated from the accounts receivable and accounts payable, so that the consolidated balance sheet shows only the amounts of the accounts with outsiders.

Company *S* also owes Company *P* $25,000.00 on a note; the amount receivable appears as an asset in Company *P*'s balance sheet and as a liability in Company *S*'s balance sheet; this intercompany obligation is also eliminated.

CHAPTER 44

PARENT AND SUBSIDIARY ACCOUNTING (Continued)—CONSOLIDATED BALANCE SHEETS SUBSEQUENT TO ACQUISITION

Parent's entries for subsidiary profits, losses, and dividends.—Before dealing with the preparation of consolidated balance sheets at dates subsequent to the acquisition of the subsidiary stock by the parent company, it will be desirable to consider the entries to be made by the parent company in recording the profits, losses, and dividends of the subsidiary.* For purposes of illustration, we shall assume the following facts:

Company *P* acquired all of the stock of Company *S* on January 1, 1934.

During the six months ended June 30, 1934, Company *S* made a profit of $20,000.00

During the six months ended December 31, 1934, Company *S* lost $10,000.00, and paid a dividend of $5,000 00.

(1) Subsidiary profit—$20,000 00: The parent company's entry for the subsidiary's profit of the first six months should be:

Investment in Stock of Company *S*.	20,000 00	
Income from Company *S*		20,000 00
To take up the subsidiary's profit for the six months ended June 30, 1934		

Explanation of debit: Subsidiary profits increase the net assets of the subsidiary, which are represented on the parent company's books by the debit balance of the Investment account. The increase in the net assets of the subsidiary

* The methods described on the following pages are standard procedure A proposed refinement is discussed in Chapter 47.

should therefore be reflected on the parent company's books by a debit to the Investment account.

Explanation of credit: Profits earned by the subsidiary are earned for the benefit of the parent company; therefore the parent company is justified in taking up the profit by a credit to an income account.

(2) Subsidiary loss—\$10,000.00: The parent company's entry for the subsidiary's loss of the second six months should be:

Loss of Company *S*	10,000 00	
Investment in Stock of Company *S*		10,000 00
To take up the subsidiary's loss for the six months ended December 31, 1934		

Explanation of debit. If the parent company takes up the subsidiary's profit by a credit to an income account, it should take up the subsidiary's loss by a debit to a loss account.

Explanation of credit: Subsidiary losses decrease the net assets of the subsidiary, which are represented on the parent company's books by the debit balance of the Investment account. The decrease in the net assets of the subsidiary should therefore be reflected on the parent company's books by a credit to the Investment account.

(3) Subsidiary dividend—\$5,000.00· The parent company's entry for the subsidiary's dividend should be:

Cash	5,000 00	
Investment in Stock of Company *S*		5,000 00
To record the receipt of a dividend from the subsidiary		

Explanation of debit: The debit to Cash records the increase in the cash in the parent company's possession.

Explanation of credit The subsidiary's net assets are decreased by the payment of a dividend. The balance in the Investment account, which

represents the net assets of the subsidiary, should therefore be reduced by a credit.

If time elapses between the declaration and the payment of the dividend, the parent company may debit Dividends Receivable and credit the Investment account, to record the declaration of the dividend. Subsequently, it will debit Cash and credit Dividends Receivable, to record the collection of the dividend.

If the parent company had owned only 90% of the subsidiary stock, its entries to record its proportion of the subsidiary's profits, losses, and dividends would have been.

Investment in Stock of Company *S*	18,000 00	
Income from Company *S*		18,000 00
To take up 90% of the profit of Company *S* for the six months ended June 30, 1934		
Loss of Company *S*	9,000 00	
Investment in Stock of Company *S*		9,000 00
To take up 90% of the loss of Company *S* for the six months ended December 31, 1934		
Cash	4,500 00	
Investment in Stock of Company *S*		4,500 00
To record the dividend received from Company *S*.		

Rule for eliminations.—The rule for making eliminations in consolidated balance sheet working papers at the date of acquisition, as developed in the preceding chapter, was stated as follows.

Subsidiary's Capital Stock and Surplus accounts:
- Eliminate reciprocal element—parent company's proportion.
- Extend non-reciprocal element (minority interest, if any) to the Consolidated Balance Sheet column.

Parent company's Investment account:
- Eliminate reciprocal element—parent company's proportion of subsidiary's stock and surplus.
- Extend non-reciprocal element (goodwill or deduction from goodwill, if any) to the Consolidated Balance Sheet column.

The same rule for eliminations can be applied at all balance sheet dates subsequent to acquisition, if the parent company has taken up subsidiary profits, losses, and dividends in the manner illustrated by the preceding journal entries.

Outline and purposes of illustrations.—Four illustrative cases are used in this chapter. All of the cases are based on the assumption that Company *S* had a capital stock of \$100,000 00 and a surplus of \$50,000 00 on January 1, 1934, the date at which Company *P* acquired its stock interest. The amounts of subsidiary profits, losses, and dividends are the same as those used in the preceding journal entries: namely, a profit of \$20,000 00 during the first six months of 1934, and a loss of \$10,000.00 and a payment of dividends of \$5,000.00 during the second six months. Consolidated balance sheets are prepared as of December 31, 1934. The cases differ as follows.

Case A· No minority interest; no goodwill.
Case B: A 10% minority interest; no goodwill.
Case C. A 10% minority interest; goodwill.
Case D: A 10% minority interest; deduction from goodwill.

These cases are used in three groups of illustrations for the following purposes.

First group of illustrations· To demonstrate (by showing the parent company's and the subsidiary company's accounts) that the rule for eliminations developed in the preceding chapter (and applied there in the preparation of consolidated balance sheets at the date of acquisition) can be applied at dates subsequent to acquisition if the parent company has recorded subsidiary profits, losses, and dividends in the manner described at the beginning of this chapter.

Second group of illustrations: To show how consolidated balance sheets at dates subsequent to acquisition may be prepared from formal working papers.

Third group of illustrations: To show how consolidated balance sheets at dates subsequent to acquisition may be prepared without formal working papers.

First Group of Illustrations

No consolidated balance sheets are prepared in this group of illustrations, as the object is merely to prove that the rule for eliminations at the date of acquisition can be applied at subsequent dates if the procedure for recording subsidiary profits, losses, and dividends described on the preceding pages of this chapter has been used by the parent company. The student should note that, in each of the four cases, the elimination of the reciprocal element (the parent company's proportion of the subsidiary's capital stock and surplus at the date of the consolidated balance sheet) leaves the following non-reciprocal elements, if any:

In the subsidiary's Capital Stock and Surplus accounts—the non-reciprocal element of minority interest.
In the parent company's Investment account—the non-reciprocal goodwill element equal to the difference between the cost of the subsidiary stock and its book value at the date of acquisition.

Case A: NO MINORITY INTEREST; NO GOODWILL.—Company P acquired all of the stock of Company S on January 1, 1934, paying exactly book value, \$150,000.00, hence there are no non-reciprocal elements of minority interest or goodwill. Following is a summary of the subsidiary's Capital Stock and Surplus accounts and the parent company's Investment account for the year 1934.

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment Account (100%)
Balances, January 1, 1934	\$100,000	\$50,000	\$150,000
Additions, June 30, 1934			
Profit		20,000	20,000
Deductions*, December 31, 1934:			
Loss		10,000*	10,000*
Dividend		5,000*	5,000*
Balances, December 31, 1934	\$100,000	\$55,000	\$155,000
Reciprocal Element—Parent Company's Interest in Stock and Surplus	100,000	55,000	155,000
Non-Reciprocal Elements			
Minority Interest			
Goodwill			

When the reciprocal element (the parent company's interest in the subsidiary stock and surplus at the end of the year) is eliminated, no non-reciprocal element remains in the subsidiary's Stock and Surplus accounts, because there is no minority interest, and no non-reciprocal element remains in the Investment account, because no payment was made for goodwill.

Case B· TEN PER CENT MINORITY INTEREST; NO GOODWILL. Company *P* acquired only 90% of the stock of Company *S* on January 1, 1934; hence there is a 10% minority interest. The book value of the stock acquired was 90% of $150,000 00, or $135,000.00, Company *P* paid $135,000.00 for the stock, hence there was no payment for goodwill.

	Subsidiary's		Parent's Investment Account
	Capital Stock	Surplus	(90%)
Balances, January 1, 1934	$100,000	$50,000	$135,000
Additions, June 30, 1934			
Profit		20,000	18,000
Deductions*, December 31, 1934			
Loss		10,000*	9,000*
Dividend		5,000*	4,500*
Balances, December 31, 1934	$100,000	$55,000	$139,500
Reciprocal Element—Parent Company's Interest in Stock and Surplus—90%	90,000	49,500	139,500
Non-Reciprocal Elements			
Minority Interest—10%	$ 10,000	$ 5,500	
Goodwill			

When the reciprocal element (the parent company's 90% interest in the subsidiary's stock and surplus at the end of the year) is eliminated, non-reciprocal elements remain in the subsidiary's Stock and Surplus accounts, because there is a 10% minority interest; but no non-reciprocal element remains in the Investment account, because there was no payment for goodwill.

Case C: TEN PER CENT MINORITY INTEREST; GOODWILL.—Company *P* acquired only 90% of the stock of Company *S* on January 1, 1934; hence there is a 10% minority interest. The book value of the stock acquired was 90% of $150,000.00, or $135,000.00, Company *P* paid $138,000.00 for the stock; hence there was a goodwill payment of $3,000.00

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment Account (90%)
Balances, January 1, 1934	$100,000	$50,000	$138,000
Additions, June 30, 1934			
Profit		20,000	18,000
Deductions*, December 31, 1934			
Loss		10,000*	9,000*
Dividend		5,000*	4,500*
Balances, December 31, 1934	$100,000	$55,000	$142,500
Reciprocal Element—Parent Company's Interest in Stock and Surplus—90%	90,000	49,500	139,500
Non-Reciprocal Elements			
Minority Interest—10%	$ 10,000	$ 5,500	
Goodwill			$ 3,000

When the reciprocal element (the parent company's 90% interest in the stock and surplus of the subsidiary at the end of the year) is eliminated, non-reciprocal elements remain in the subsidiary's Stock and Surplus accounts, because there is a 10% minority interest; a non-reciprocal element also remains in the Investment account, representing the payment made for goodwill

Case D. Ten per cent minority interest; deduction from goodwill.—Company *P* acquired only 90% of the stock of Company *S* on January 1, 1934, leaving a 10% minority interest. The book value of the stock acquired was 90% of $150,000 00, or $135,000 00, the price paid was $130,000.00, leaving a deduction from goodwill of $5,000.00.

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment Account (90%)
Balances, January 1, 1934	$100,000	$50,000	$130,000
Additions, June 30, 1934			
Profit		20,000	18,000
Deductions*, December 31, 1934			
Loss		10,000*	9,000*
Dividend		5,000*	4,500*
Balances, December 31, 1934	$100,000	$55,000	$134,500
Reciprocal Element—Parent Company's Interest in Stock and Surplus—90%	90,000	49,500	139,500
Non-Reciprocal Elements			
Minority Interest—10%	$ 10,000	$ 5,500	
Deduction from Goodwill			5 000*

When the reciprocal elements are eliminated, non-reciprocal elements remain in the subsidiary's Stock and Surplus accounts because there is a 10% minority interest; a negative non-reciprocal element appears in the Investment account, representing the deduction from goodwill.

Second Group of Illustrations

Working papers.—The four preceding cases will now be repeated, using the customary working papers to show the elimination of the reciprocal elements, and the extension of non-reciprocal elements (if any) to the Consolidated Balance Sheet columns.

Case A. NO MINORITY INTEREST; NO GOODWILL.—By reference to the first of the four preceding cases, it will be noted that there is no minority interest, and that no goodwill payment was made by the parent company. (The $10,000.00 goodwill appearing in the consolidated balance sheet is the amount shown on the subsidiary's books.)

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Cash	45,000	20,000		65,000
Accounts Receivable	95,000	75,000		170,000
Inventory	125,000	70,000		195,000
Investment in Stock of Company *S*.	155,000			
Eliminate Book Value				
Capital Stock			100,000	
Surplus			55,000	
Goodwill		10,000		10,000
	420,000	175,000	155,000	440,000
Liabilities and Net Worth				
Accounts Payable	40,000	20,000		60,000
Capital Stock				
Company *P*	300,000			300,000
Company *S*		100,000		
Eliminate Company *P*'s 100%			100,000	
Surplus:				
Company *P*	80,000			80,000
Company *S*		55,000		
Eliminate Company *P*'s 100%			55,000	
	420,000	175,000	155,000	440,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 65,000	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Net Worth		
Inventory	195,000	Capital Stock	$300,000	
Goodwill	10,000	Surplus	80,000	380,000
	$440,000			$440,000

Case B TEN PER CENT MINORITY INTEREST; NO GOODWILL.—By reference to the second of the preceding cases, it will be noted that Company *P* bought only 90% of the subsidiary stock, leaving a 10% minority interest. The stock was purchased at its exact book value, with no goodwill payment and no deduction from goodwill.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Cash	59,500	20,000		79,500
Accounts Receivable	95,000	75,000		170,000
Inventory	125,000	70,000		195,000
Investment in Stock of Company *S*	139,500			
Eliminate Book Value—90%				
Capital Stock			90,000	
Surplus			49,500	
Goodwill		10,000		10,000
	419,000	175,000	139,500	454,500
Liabilities and Net Worth				
Accounts Payable	40,000	20,000		60,000
Capital Stock:				
Company *P*	300,000			300,000
Company *S*		100,000		
Eliminate Company *P*'s 90%			90,000	
Minority Interest—10%				10,000M
Surplus				
Company *P*	79,000			79,000
Company *S*		55,000		
Eliminate Company *P*'s 90%			49,500	
Minority Interest—10%				5,500M
	419,000	175,000	139,500	454,500

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 79,500	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Minority Interest in Co *S*		15,500
Inventory	195,000	Net Worth		
Goodwill	10,000	Capital Stock	$300,000	
		Surplus	79,000	379,000
	$454,500			$454,500

Case C: Ten per cent minority interest, goodwill.—By reference to the third of the preceding cases, it will be noted that Company *P* bought only 90% of the subsidiary stock, leaving a 10% minority interest. The price paid was $3,000.00 more than the book value of the stock, this amount represents a payment for goodwill

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Cash	56,500	20,000		76,500
Accounts Receivable	95,000	75,000		170,000
Inventory	125,000	70,000		195,000
Investment in Stock of Company *S*	142,500			
Eliminate Book Value—90%				
Capital Stock			90,000	
Surplus			49,500	
Goodwill				3,000G
Goodwill		10,000		10,000G
	419,000	175,000	139,500	454,500
Liabilities and Net Worth				
Accounts Payable	40,000	20,000		60,000
Capital Stock				
Company *P*	300,000			300,000
Company *S*		100,000		
Eliminate Company *P*'s 90%			90,000	
Minority Interest—10%				10,000M
Surplus				
Company *P*	79,000			79,000
Company *S*		55,000		
Eliminate Company *P*'s 90%			49,500	
Minority Interest—10%				5,500M
	419 000	175,000	139,500	454,500

Note that the goodwill on the books of Company *S* and

the goodwill payment made in the acquisition of its stock are combined in the following consolidated balance sheet:

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 76,500	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Minority Interest in Co *S*—10% . .		15,500
Inventory	195,000			
Goodwill	13,000	Net Worth		
		Capital Stock	$300,000	
		Surplus .	79,000	379,000
	$454,500			$454,500

Case D· TEN PER CENT MINORITY INTEREST, DEDUCTION FROM GOODWILL.—By reference to the fourth of the preceding cases, it will be noted that there was a 10% minority interest, and that the parent company bought the subsidiary stock at $5,000.00 less than its book value.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Cash	64,500	20,000		84,500
Accounts Receivable	95,000	75,000		170,000
Inventory	125,000	70,000		195,000
Investment in Stock of Company *S*	134,500			
Eliminate Book Value—90%				
Capital Stock			90,000	
Surplus			49,500	
Deduction from Goodwill				5,000*G
Goodwill .		10,000		10,000G
	419,000	175,000	139,500	454,500
Liabilities and Net Worth				
Accounts Payable	40,000	20,000		60,000
Capital Stock				
Company *P* . .	300,000			300,000
Company *S* . .		100,000		
Eliminate Company *P*'s 90%			90,000	
Minority Interest—10% .				10,000M
Surplus				
Company *P*	79,000			79,000
Company *S*		55,000		
Eliminate Company *P*'s 90%			49,500	
Minority Interest—10%				5,500M
	419,000	175,000	139,500	454,500

Note that, in the following consolidated balance sheet, the amount shown as goodwill is the $10,000.00 balance on the books of Company *S* minus the $5,000 00 goodwill deduction resulting from the purchase of the stock of Company *S* at less than book value.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 84,500	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Minority Int in Co. *S*—10%		15,500
Inventory	195,000	Net Worth:		
Goodwill	5,000	Capital Stock	$300,000	
		Surplus	79,000	379,000
	$454,500			$454,500

Third Group of Illustrations

Consolidated balance sheets without working papers.—Although students should be thoroughly familiar with the method of preparing consolidated balance sheet working papers, it is often a simple matter to prepare a consolidated balance sheet without formal working papers. To show how this may be done, we shall again repeat the four cases already given in this chapter. The procedure for preparing a consolidated balance sheet without formal working papers is summarized as follows:

(1) On scratch paper or in simple working papers, deduct the reciprocal element (parent company's interest in subsidiary stock and surplus) from the Investment account, to determine any goodwill or negative goodwill element, and from the subsidiary's Capital Stock and Surplus accounts, to determine any minority interest.

(2) Enter in the consolidated balance sheet:

  (a) The combined balances of similar asset accounts. Do not include the Investment account. Adjust the combined goodwill balances by any positive or negative goodwill element determined in (1)

  (b) The combined balances of similar liability accounts.

  (c) The minority interest determined in (1).

(d) The parent company's capital stock and surplus under the net worth caption.

Case A. No minority interest, no goodwill.—Following are the balance sheets of the two companies used in the first case. (See pages 217 and 220.) The parent company owns all of the subsidiary stock

	Company *P*	Company *S*
Assets		
Cash	\$ 45,000 00	\$ 20,000 00
Accounts Receivable	95,000 00	75,000 00
Inventory	125,000 00	70,000 00
Investment in Stock of Company *S*—100%	155,000 00	
Goodwill		10,000 00
	\$420,000 00	\$175,000 00
Liabilities and Net Worth		
Accounts Payable	\$ 40,000 00	\$ 20,000 00
Capital Stock	300,000 00	100,000 00
Surplus	80,000 00	55,000 00
	\$420,000 00	\$175,000 00

The consolidated balance sheet appears on page 226. It was prepared by the procedure described on page 224.

(1) The reciprocal element was deducted from the Investment account and from the subsidiary's Stock and Surplus accounts as shown below. No goodwill or minority interest remained.

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment Account (100%)
Balances	\$100,000	\$55,000	\$155,000
Deduct Reciprocal Element—100%	100,000	55,000	155,000
Non-Reciprocal Elements	—	—	—

(2) The following amounts were entered in the consolidated balance sheet:
   (a) Combined balances of asset accounts: Cash, Accounts Receivable, Inventory, Goodwill. (No adjustment of the goodwill.)
   (b) Combined balances of liability accounts: Accounts Payable.
   (c) Minority interest: none.
   (d) Net worth: parent company's capital stock and surplus.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 65,000	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Net Worth		
Inventory	195,000	Capital Stock	$300,000	
Goodwill	10,000	Surplus	80,000	380,000
	$440,000			$440,000

Case B: TEN PER CENT MINORITY INTEREST; NO GOODWILL Following are the balance sheets used in the second case. (See pages 218 and 221.) The parent company owns 90% of the stock of the subsidiary.

	Company *P*	Company *S*
Assets		
Cash	$ 59,500 00	$ 20,000 00
Accounts Receivable	95,000 00	75,000 00
Inventory	125,000 00	70,000 00
Investment in Stock of Company *S*—90%	139,500 00	
Goodwill		10,000 00
	$419,000.00	$175,000 00
Liabilities and Net Worth		
Accounts Payable	$ 40,000 00	$ 20,000 00
Capital Stock	300,000 00	100,000 00
Surplus	79,000 00	55,000 00
	$419 000 00	$175,000 00

The consolidated balance sheet appears on page 227.

(1) The reciprocal element was deducted from the Investment account and from the subsidiary's Capital Stock and Surplus accounts, to determine any goodwill or minority interest, thus:

	SUBSIDIARY'S Capital Stock	SUBSIDIARY'S Surplus	Parent's Investment Account (90%)
Balances	$100,000	$55,000	$139,500
Deduct Reciprocal Element—90%	90,000	49,500	139,500
Non-Reciprocal Elements			
Minority Interest—10%	$ 10,000	$ 5,500	
Goodwill			

(2) The following amounts were entered in the consolidated balance sheet:

(a) Combined balances of asset accounts: Cash,

Accounts Receivable, Inventory, Goodwill. (No adjustment of goodwill.)

(b) Combined balances of liability accounts: Accounts Payable.

(c) Minority interest determined in (1).

(d) Net worth: parent company's capital stock and surplus

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 79,500	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Minority Int in Co *S*—10%		15,500
Inventory	195,000	Net Worth		
Goodwill	10,000	Capital Stock	$300,000	
		Surplus	79,000	379,000
	$454,500			$454,500

Case C. Ten per cent minority interest; goodwill.—Following are the balance sheets used in the third case. (See pages 218 and 222). The parent company owns 90% of the subsidiary stock.

	Company *P*	Company *S*
Assets		
Cash	$ 56,500 00	$ 20,000 00
Accounts Receivable	95,000 00	75,000 00
Inventory	125,000 00	70,000 00
Investment in Stock of Company *S*—90%	142,500 00	
Goodwill		10,000 00
	$419,000 00	$175,000 00
Liabilities and Net Worth		
Accounts Payable	$ 40,000 00	$ 20,000 00
Capital Stock	300,000 00	100,000 00
Surplus	79,000 00	55,000 00
	$419,000 00	$175,000 00

(1) Determination of minority interest and goodwill:

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment Account (90%)
Balances	$100,000 00	$55,000 00	$142,500 00
Reciprocals To Be Eliminated—90%	90,000 00	49,500 00	139,500 00
Non-Reciprocals:			
Minority Interest	$ 10,000 00	$ 5,500 00	
Goodwill			$ 3,000 00

(2) The following amounts were entered in the consolidated balance sheet:

(a) Combined balances of asset accounts: Cash, Accounts Receivable, Inventory. The amount shown as Goodwill in the consolidated balance sheet is the sum of the $10,000.00 account on the books of Company *S* and the $3,000.00 goodwill element determined in (1) above.

(b) Combined amounts of liability accounts: Accounts Payable.

(c) Minority interest of $15,500 00, as determined in (1) above.

(d) Net worth: parent company's capital stock and surplus.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 76,500	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Minority Int in Co *S*—10%		15,500
Inventory	195,000	Net Worth		
Goodwill	13,000	Capital Stock	$300,000	
		Surplus	79,000	379,000
	$454,500			$454,500

Case D: TEN PER CENT MINORITY INTEREST; DEDUCTION FROM GOODWILL —Following are the balance sheets used in the fourth case. (See pages 219 and 223.) The parent company owns 90% of the subsidiary stock.

	Company *P*	Company *S*
Assets		
Cash	$ 64,500 00	$ 20,000 00
Accounts Receivable	95,000 00	75,000 00
Inventory	125,000 00	70,000 00
Investment in Stock of Company *S*—90%	134,500 00	
Goodwill		10,000 00
	$419,000 00	$175,000 00
Liabilities and Net Worth		
Accounts Payable	$ 40,000 00	$ 20,000 00
Capital Stock	300,000 00	100,000 00
Surplus	79,000 00	55,000 00
	$419,000 00	$175,000 00

(1) Determination of minority interest and goodwill.

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment Account (90%)
Balances	$100,000 00	$55,000 00	$134,500 00
Reciprocals To Be Eliminated—90%	90,000 00	49,500 00	139 500 00
Non-Reciprocal Elements			
Minority Interest—10%	$ 10,000 00	$ 5,500 00	
Deduction from Goodwill			$ 5,000 00*

(2) The following amounts were entered in the consolidated balance sheet below.

(a) Combined balances of asset accounts Cash, Accounts Receivable, Inventory. The Goodwill in the consolidated balance sheet is the amount shown in the balance sheet of Company S, minus the goodwill deduction determined in (1) above.

(b) Combined balances of liability accounts Accounts Payable.

(c) Minority interest of $15,500 00, as determined in (1) above.

(d) Net worth. parent company's capital stock and surplus.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 84,500	Accounts Payable		$ 60,000
Accounts Receivable	170,000	Minority Int in Co S—10%		15,500
Inventory	195,000	Net Worth.		
Goodwill	5,000	Capital Stock	$300,000	
		Surplus	79,000	379,000
	$454,500			$454,500

CHAPTER 45

PARENT AND SUBSIDIARY ACCOUNTING (Continued)
CONSOLIDATED BALANCE SHEET IF INVESTMENT IS CARRIED AT COST

Carrying investment at cost.—The preceding chapter explained the journal entries by which a parent company may debit its Investment account with subsidiary profits, and credit its Investment account with subsidiary losses and dividends.

Some parent companies, however, make no entries in the Investment account except those to record the cost of the stock purchased. No entries whatever are made for subsidiary profits and losses, but dividends from the subsidiary are recorded by debiting Cash and crediting Dividends from Subsidiary (or some similar account), which is regarded as an income account and is closed to Profit and Loss.

The two methods of accounting used by parent companies are compared below.

	Profits, Losses, and Dividends Recorded Through Investment Account (*First Method*)			**Dividends Recorded as Income** (*Second Method*)		
Profit	Investment in Company *S*	20,000		No entry		
	Income from *S*		20,000			
Loss	Loss from *S*	10,000		No entry		
	Investment in Company *S*		10,000			
Dividend	Cash	5,000		Cash	5,000	
	Investment in Company *S*.		5,000	Dividends from Company *S*		5,000

If this method is used, the Income and Loss accounts are closed to Profit and Loss and thence to Surplus.

If this method is used, the Dividends account is closed to Profit and Loss and thence to Surplus.

In the following discussion and illustrations, we shall show only the ultimate effect upon Surplus, without indicating the entries to be made in the Income, Loss, or Dividend accounts.

Effect of the two methods on the Investment accounts.—The Investment accounts resulting from the two methods of accounting are shown below. (It is assumed that the subsidiary stock was purchased for $100,000.00.)

Investment Account (*First Method*)				Investment Account (*Second Method*)			
Cost	100,000	Loss	10,000	Cost	100,000		
Profit	20,000	Dividend	5,000				

If the first method of accounting is used, increases in the net assets of the subsidiary, caused by profits, are reflected by corresponding increases in the balance of the Investment account; and decreases in the net assets of the subsidiary, caused by losses and dividends, are reflected by corresponding decreases in the balance of the Investment account.

If the second method of accounting is used, the Investment is carried at cost

Obviously, the first method is preferable because the carrying value of the investment is increased and decreased in accordance with increases and decreases in the subsidiary net assets which underlie and give value to the investment.

Effect of the two methods on parent's Surplus.—The effect of the two methods on the parent company's Surplus is shown below. (It is assumed, for the sake of simplicity, that the parent company has no surplus from its own operations.)

Surplus (*First Method*)				Surplus (*Second Method*)			
Loss	10,000	Profit	20,000			Dividend	5,000

If the first method is used, the parent company's Surplus account is debited with its proportion of the subsidiary's loss, and credited with its proportion of the subsidiary's profit

If the second method is used, the parent company's Surplus account is credited with dividends received from the subsidiary.

Obviously, the first method is preferable because it shows the parent company's true net income from the investment.

The dividends received from a subsidiary may be greater or less than the parent company's share of the subsidiary's net income In fact, the subsidiary might incur a loss and still pay dividends from previously accumulated surplus; in that event, the second method would result in crediting the parent company's surplus with the dividend instead of debiting it with the loss.

Differences in account balances.—The preceding chapter discussed the method of preparing consolidated balance sheets when the parent company takes up its share of subsidiary profits, losses, and dividends. This chapter explains the procedure of preparing consolidated balance sheets if the parent company carries the investment at cost and takes up subsidiary dividends as income. Some difference in procedure is required because the balances in the parent company's Investment and Surplus accounts differ under the two methods of accounting. Before discussing the procedure to be followed if the investment is carried at cost, let us consider four illustrations which show what the differences in account balances will be.

In all of the illustrations it is assumed that the parent company purchased the subsidiary stock on January 1, 1934, at which date the subsidiary had a capital stock of $100,000.00 and a surplus of $50,000.00. It is also assumed that the parent company has no surplus arising from its own operations.

First illustration.—The parent company purchased all of the subsidiary stock, paying book value therefor, or $150,000.00. During the year, the subsidiary made a profit of $10,000.00 and paid a dividend of $6,000 00.

		Parent Company's Accounts			
		(*Method 1*)		(*Method 2*)	
Subsidiary's Surplus		Investment Account	Surplus	Investment Account	Surplus
$50,000	Balances—January 1	$150,000		$150,000	
10,000	Profit	10,000	$10,000		
6,000*	Dividend	6,000*			$6,000
$54,000	Balances—December 31	$154,000	$10,000	$150,000	$6,000
	Differences in parent company's accounts by the two methods—equal to increase in subsidiary's surplus since the date of acquisition			4,000	4,000

* Decrease

Under the second method of accounting, the parent company has not increased its Investment account for the $4,000.00 increase in subsidiary net assets and surplus since acquisition, moreover, in its Surplus account, it has taken up only the $6,000.00 dividend instead of the $10,000.00 profit, thus understating its surplus $4,000.00.

To bring the balances obtained by Method 2 into agreement with the balances which would have been obtained by Method 1, the parent company could make the following adjustment:

Investment in Company *S* .	4,000 00	
Surplus		4,000 00
To take up the subsidiary profits not received as dividends Amount is equal to the increase in subsidiary's net assets and surplus since acquisition		

Second illustration.—This illustration is the same as the preceding one, except that the parent company purchased only 90% of the subsidiary stock, paying book value therefor, or 90% of $150,000.00, or $135,000.00.

		Parent Company's Accounts			
		(*Method 1*)		(*Method 2*)	
Subsidiary's Surplus		Investment Account	Surplus	Investment Account	Surplus
$50,000	Balances—January 1	$135,000		$135,000	
10,000	Profit	9,000	$9,000		
6,000*	Dividend .	5,400*			$5,400
$54,000	Balances—December 31	$138,600	$9,000	$135,000	$5,400
	Differences in parent company's accounts by the two methods—equal to 90% of the $4,000 00 increase in the subsidiary's net assets and surplus since the date of acquisition			3,600	3,600

* Decrease

To bring the balances obtained by Method 2 into agreement with those which would have been obtained by Method 1, the parent company could make the following adjustment:

Investment in Company *S*	3,600 00	
Surplus .		3,600 00
To take up our share of subsidiary profits not received as dividends. Amount is equal to 90% of the increase in subsidiary's surplus since acquisition		

Third illustration.—The parent company bought all of the subsidiary stock, paying its book value, or $150,000.00. During the year, the subsidiary lost $10,000.00, and paid a $6,000.00 dividend from previously accumulated surplus.

		Parent Company's Accounts			
		(*Method 1*)		(*Method 2*)	
Subsidiary's Surplus		Investment Account	Surplus	Investment Account	Surplus
$50,000	Balances—January 1	$150,000		$150,000	
10,000*	Loss	10,000*	$10,000*		
6,000*	Dividend	6,000*			$ 6,000
$34,000	Balances—December 31	$134,000	$10,000*	$150,000	$ 6,000
	Differences in parent company's accounts by the two methods—equal to decrease in subsidiary's surplus since the date of acquisition			16,000*	16,000*

* Decrease

To bring the balances obtained by Method 2 into agreement with the balances which would have been obtained by Method 1, the parent company could make the following adjustment.

Surplus	16,000 00	
Investment in Company *S*		16,000 00
To adjust our accounts by taking up the decrease in the subsidiary's surplus since the date of acquisition		

Fourth illustration.—This illustration is the same as the preceding one, except that the parent company purchased only 90% of the subsidiary stock, paying book value therefor, or 90% of $150,000.00, or $135,000.00.

		Parent Company's Accounts			
		(*Method 1*)		(*Method 2*)	
Subsidiary's Surplus		Investment Account	Surplus	Investment Account	Surplus
$50,000	Balances—January 1	$135,000		$135,000	
10,000*	Loss	9,000*	$ 9,000*		
6,000*	Dividend	5,400*			$ 5,400
$34,000	Balances—December 31.	$120,600	$ 9,000*	$135,000	$ 5,400
	Differences in parent company's accounts by the two methods—equal to 90% of the $16,000 00 decrease in the subsidiary's surplus since the date of acquisition			14,400*	14,400*

* Decrease

To bring the balances obtained by Method 2 into agreement with those which would have been obtained by using Method 1, the parent company could make the following adjustment:

Surplus	14,400 00	
Investment in Company *S*		14,400 00
To adjust our accounts by taking up 90% of the decrease in the subsidiary's surplus since the date of acquisition		

Summary.—The foregoing illustrations show that, if the parent company follows the second method of accounting, the balances in its Investment and Surplus accounts can be adjusted to agree with the balances which would have been obtained under the first method, by applying the following simple rule:

(1) Determine the amount of the increase or decrease in the subsidiary's surplus since the date of acquisition by the parent company.
(2) Multiply this increase or decrease by the parent company's per cent of stock ownership, to determine the portion of the increase or decrease in subsidiary surplus applicable to the stock owned by the parent company.
(3) If the subsidiary surplus has increased, debit the Investment account and credit the parent company's Surplus account for the amount determined in (2).
(4) If the subsidiary surplus has decreased, debit the parent company's Surplus and credit the Investment account for the amount of the decrease determined in (2).

Preparing the consolidated balance sheet.—If the parent company has carried its investment at cost and has taken up subsidiary dividends as income, a consolidated balance sheet may be prepared by the following procedure:

(1) In the working papers, adjust the parent company's Investment and Surplus accounts by making the debit and credit entries described above in paragraph (3) or (4)

(2) As the adjusted balances of the Investment and Surplus accounts will then be the same as they would have been if the first method of accounting had been followed, a consolidated balance sheet may be prepared by the methods already described.

Several illustrations are given in the remaining sections of this chapter The balance sheets of the parent and subsidiary companies are shown in the first two columns of the working papers. In all cases it is assumed that:

(1) The subsidiary had a capital stock of $100,000.00 and a surplus of $50,000.00 on January 1, 1934, when the parent company acquired its stock.
(2) The investment is carried at cost on the parent company's books.
(3) The parent company has a surplus of $30,000.00 from its own operations, and has taken up as income (and included in its surplus) the dividends received from the subsidiary.

First illustration.—The parent company purchased all of the subsidiary stock at book value, $150,000.00. (No goodwill and no minority interest.) The subsidiary made a profit of $10,000.00 during the year, and paid a dividend of $6,000.00. Its surplus was therefore increased $4,000.00 during the year.

Following is the consolidated balance sheet:

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 55,000	Accounts Payable		$ 61,000
Accounts Receivable	145,000	Net Worth		
Inventory	191,000	Capital Stock	$300,000	
Goodwill	10,000	Surplus	40,000	340,000
	$401,000			$401,000

This consolidated balance sheet could be prepared from the working papers on page 238. Note the debit and credit entries in the two Adjustment columns to adjust the parent company's Investment and Surplus accounts for the $4,000.00 increase in the subsidiary's Surplus since acquisition.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Cash	35,000 00	20,000 00				55,000.00
Accounts Receivable	80 000 00	65,000 00				145,000 00
Inventory	111,000 00	80,000 00				191 000 00
Investment in Company *S*—100% (Cost)	150,000 00					
Adjustment—Increase in Company *S* Net Assets since Acquisition			4 000 00			
Eliminate Book Value.						
Capital Stock					100,000 00	
Surplus					54,000 00	
Goodwill		10,000 00				10,000 00
	376,000 00	175,000 00			154,000 00	401,000 00
Liabilities and Net Worth						
Accounts Payable	40,000 00	21,000 00				61,000 00
Capital Stock						
Company *P*	300 000 00					300,000 00
Company *S*		100,000 00				
Eliminate Company *P*'s 100%					100,000 00	
Surplus						
Company *P*	36,000 00					
Adjustment—Increase in Company *S* Surplus since Acquisition				4,000 00		40,000 00
Company *S*		54,000 00				
Eliminate Company *P*'s 100%					54,000 00	
	376,000 00	175,000 00	4,000 00	4,000 00	154,000 00	401,000 00

A consolidated balance sheet can be prepared from the foregoing working papers, or one can be prepared without formal working papers by the method described on page 224 of the preceding chapter, thus:

(1) In the following simple working papers, adjust the parent company's Investment and Surplus accounts. Then make the customary eliminations from the Investment account and from the subsidiary's Capital Stock and Surplus accounts, to determine the amounts (if any) of goodwill and minority interest.

	Subsidiary's		Parent's	
	Capital Stock	Surplus	Investment	Surplus
Balances before Adjustment	$100,000	$54,000	$150,000	$36,000
Add Increase in Subsidiary's Net Assets and Surplus since Date of Acquisition			4,000	4,000
Adjusted Balances			$154,000	$40,000
Deduct Reciprocal Element—100%	100,000	54,000	154,000	
Non-Reciprocal Elements	—	—	—	

(2) Enter in the consolidated balance sheet:
   (a) Combined balances of asset accounts.
   (b) Combined balances of liability accounts.
   (c) Minority interest: none.
   (d) Net worth parent company's capital stock and the $40,000.00 adjusted balance of its Surplus.

Second illustration.—The parent company purchased only 90% of the stock, leaving a 10% minority interest. The book value of the stock purchased was 90% of $150,000.00, or $135,000.00; the price paid was $138,000.00; hence, there is a goodwill element of $3,000.00. The subsidiary made a profit of $10,000 00 during the year, and paid a dividend of $6,000.00, thus increasing its surplus $4,000.00. The parent company's portion of this increase in surplus was 90% of $4,000 00, or $3,600.00.

The consolidated balance sheet can be prepared from the working papers on page 240 Note the adjustment of the parent company's Investment and Surplus accounts for the 90% interest in the increase in the subsidiary's Surplus since acquisition.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Adjustments Debit	Adjustments Credit	Elimi-nations	Consolidated Balance Sheet
Assets						
Cash	47,000 00	20,000 00				67,000 00
Accounts Receivable	80,000 00	65,000 00				145,000 00
Inventory	111,000 00	80,000 00				191,000 00
Investment in Company *S*—90% (Cost)	138,000 00					
Adjustment—90% of Increase in Company *S* Net Assets since Acquisition			3,600 00			
Eliminate Book Value						
Capital Stock—90%					90,000 00	
Surplus—90%					48,600 00	
Goodwill						3,000 00G
Goodwill		10,000 00				10,000 00G
	376,000 00	175 000 00			138,600 00	416,000 00
Liabilities and Net Worth						
Accounts Payable	40,000 00	21,000 00				61,000 00
Capital Stock						
Company *P*	300,000 00					300,000 00
Company *S*		100,000 00				
Eliminate Company *P*'s 90%					90,000 00	
Minority Interest—10%						10,000 00M
Surplus						
Company *P*	36,000 00					
Adjustment—90% of Increase in Company *S* Surplus since Acquisition				3,600 00		39,600 00
Company *S*		54,000 00				
Eliminate Company *P*'s 90%					48,600 00	
Minority Interest—10%						5,400 00M
	376,000 00	175,000 00	3,600 00	3 600 00	138 600 00	416,000 00

The consolidated balance sheet may be prepared without formal working papers thus:

(1) Adjust the parent company's Investment and Surplus accounts, and determine the minority interest and goodwill.

	Subsidiary's		Parent's	
	Capital Stock	Surplus	Investment	Surplus
Balances before Adjustment	$100,000	$54,000	$138,000	$36,000
Add 90% of $4,000 Increase in Subsidiary Surplus since Acquisition			3,600	3,600
Adjusted Balances			$141,600	$39,600
Deduct Reciprocal Elements—90%	90,000	48,600	138,600	
Non-Reciprocal Elements.				
Minority Interest—10%	$ 10,000	$ 5,400		
Goodwill			$ 3,000	

(2) Enter in the consolidated balance sheet:
   (a) Combined balances of asset accounts; add the $3,000 goodwill adjustment to the goodwill in the balance sheet of Company *S*.
   (b) Combined balances of liability accounts.
   (c) Minority interest of $15,400.00, as determined in (1).
   (d) Net worth: parent company's capital stock and the $39,600.00 adjusted balance of its Surplus account.

Following is the consolidated balance sheet:

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 67,000	Accounts Payable.		$ 61,000
Accounts Receivable	145,000	Minority Int in Co *S*—10%		15,400
Inventory	191,000	Net Worth		
Goodwill	13,000	Capital Stock	$300,000	
		Surplus	39,600	339,600
	$416,000			$416,000

Third illustration.—The parent company purchased a 90% interest in the subsidiary stock. The book value of the stock was $135,000.00, and the purchase price was $138,000.00. During 1934, the subsidiary lost $10,000.00 and paid a

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet Working Papers

December 31, 1934

	Company *P*	Company *S*	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Cash	47,000 00	20,000 00				67,000 00
Accounts Receivable	80,000 00	65 000 00				145,000 00
Inventory	111,000 00	80,000 00				191 000 00
Investment in Company *S*—90% (Cost)	138,000 00					
Adjustment—90% of $16,000 Decrease in Subsidiary Net Assets since Acquisition				14,400 00		
Eliminate Book Value						
Capital Stock—90%					90,000 00	
Surplus—90% of $34,000					30 600 00	
Goodwill						3,000 00G
Goodwill		10,000 00				10,000 00G
	376 000 00	175,000 00			120,600 00	416,000 00
Liabilities and Net Worth						
Accounts Payable	40,000 00	41,000 00				81,000 00
Capital Stock.						
Company *P*	300 000 00					300,000 00
Company *S*		100,000 00				
Eliminate Company *P*'s 90%					90,000 00	
Minority Interest—10%						10,000 00M
Surplus:						
Company *P*	36,000 00					
Adjustment—90% of $16,000 Decrease in Subsidiary Surplus since Acquisition			14,400.00			21,600 00
Company *S*		34,000 00				
Eliminate Company *P*'s 90%					30,600 00	
Minority Interest—10%						3,400 00M
	376,000 00	175,000 00	14,400 00	14,400 00	120,600 00	416,000 00

$6,000 00 dividend, thus decreasing its surplus $16,000.00. The parent company's portion of this decrease was 90% of $16,000.00, or $14,400 00.

The consolidated balance sheet may be prepared without formal working papers thus.

(1) Adjust the parent company's Investment and Surplus accounts and determine the minority interest and goodwill.

	Subsidiary's		Parent's	
	Capital Stock	Surplus	Investment	Surplus
Balances before Adjustment	$100,000	$34,000	$138,000	$36,000
Deduct 90% of $16,000 Decrease in Subsidiary Surplus since Acquisition			14,400	14,400
Adjusted Balances			$123,600	$21,600
Deduct Reciprocal Elements—90%	90,000	30,600	120,600	
Non-Reciprocal Elements				
Minority Interest—10%	$ 10,000	$ 3,400		
Goodwill			$ 3,000	

(2) Enter in the consolidated balance sheet.

(a) Combined balances of asset accounts; add the $3,000.00 goodwill element to the goodwill in the balance sheet of Company *S*.

(b) Combined balances of liability accounts.

(c) Minority interest of $13,400.00, as determined in (1).

(d) Net worth. parent company's capital stock and adjusted surplus of $21,600 00.

Following is the consolidated balance sheet, which could be prepared from the working papers on page 242, or by the method just described.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet
December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 67,000	Accounts Payable		$ 81,000
Accounts Receivable	145,000	Minority Int in Co *S*—10%		13,400
Inventory	191,000	Net Worth:		
Goodwill	13,000	Capital Stock	$300,000	
		Surplus	21,600	321,600
	$416,000			$416,000

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934

	Company *P*	Company *S*	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Cash	54,000 00	20,000 00				74,000 00
Accounts Receivable	80,000 00	65,000 00				145,000 00
Inventory	111,000 00	80,000 00				191,000 00
Investment in Company *S*—90% (Cost)	131,000 00					
Adjustment—90% of $16,000 Decrease in Subsidiary Net Assets since Acquisition				14,400 00		
Eliminate Book Value.						
Capital Stock—90%					90,000 00	
Surplus—90% of $34,000					30,600 00	
Deduction from Goodwill						4,000 00*G
Goodwill		10,000 00				10,000 00G
	376,000 00	175,000 00			120,600 00	416,000 00
Liabilities and Net Worth						
Accounts Payable	40,000 00	41,000 00				81,000 00
Capital Stock						
Company *P*	300,000 00					300,000 00
Company *S*		100,000 00				
Eliminate Company *P*'s 90%					90,000 00	
Minority Interest—10%						10,000 00M
Surplus:						
Company *P*	36,000 00					
Adjustment—90% of $16,000 Decrease in Subsidiary Surplus since Acquisition			14,400 00			21,600 00
Company *S*		34,000 00				
Eliminate Company *P*'s 90%					30,600 00	
Minority Interest—10%						3,400 00M
	376,000 00	175,000 00	14 400 00	14,400 00	120,600 00	416,000 00

Fourth illustration.—The parent company purchased a 90% interest in the subsidiary, the book value of the stock was $135,000.00, and the purchase price was $131,000.00, thus, there is a negative goodwill element of $4,000.00. During the year, the subsidiary lost $10,000.00, and paid a dividend of $6,000 00.

The consolidated balance sheet may be prepared from the working papers on page 244; or without them, thus:

(1) Adjust the parent company's Investment and Surplus accounts, and determine the minority interest and the goodwill.

	Subsidiary's Capital Stock	Subsidiary's Surplus	Parent's Investment	Parent's Surplus
Balances before Adjustment	$100,000	$34,000	$131,000	$36,000
Deduct 90% of $16,000 Decrease in Subsidiary Surplus since Acquisition			14,400	14,400
Adjusted Balances			$116,600	$21,600
Deduct Reciprocal Elements—90%	90,000	30,600	120,600	
Non-Reciprocal Elements				
Minority Interest—10%	$ 10,000	$ 3,400		
Deduction from Goodwill			$ 4,000*	

(2) Enter in the consolidated balance sheet:
   (a) Combined balances of asset accounts; deduct the $4,000.00 negative goodwill item from the $10,000.00 goodwill shown in the balance sheet of Company *S*.
   (b) Combined balances of liability accounts
   (c) Minority interest of $13,400.00.
   (d) Net worth: parent company's capital stock and adjusted surplus of $21,600.00.

Following is the consolidated balance sheet:

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet

December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 74,000	Accounts Payable		$ 81,000
Accounts Receivable	145,000	Minority Int in Co *S*—10%		13,400
Inventory	191,000	Net Worth		
Goodwill	6,000	Capital Stock	$300,000	
		Surplus	21,600	321,600
	$416,000			$416,000

CHAPTER 46

PARENT AND SUBSIDIARY ACCOUNTING (Continued)
INTERCOMPANY ACCOUNTS

Intercompany notes discounted.—The elimination of intercompany accounts receivable and payable and intercompany notes receivable and payable has been illustrated. The situation is more complex when one company has discounted notes receivable taken from a related company. To illustrate, assume that Company *A* has given a \$5,000.00 note to Company *B*. Company *B* has discounted this note with its bankers At the date of the consolidated balance sheet, the note has not matured.

Since the note is in the hands of the bankers, the liability is no longer an intercompany one, and hence it must be shown as a liability on the consolidated balance sheet. The Notes Payable account on Company *A*'s books should be offset in the working papers against the Notes Receivable account on Company *B*'s books, and the Notes Receivable—Company *A* —Discounted account should be carried to the Consolidated Balance Sheet column, thus:

	Company *A*	Company *B*	Eliminations	Consolidated Balance Sheet
Assets				
Notes Receivable—Co *A*		5,000	5,000	
Liabilities				
Notes Payable—Co *B*	5,000		5,000	
Notes Rec —Co *A*—Discounted		5,000		5,000

There is a difference of opinion among accountants as to whether the \$5,000 00 liability to outsiders should be shown in the consolidated balance sheet as Notes Receivable—Company *A*—Discounted, or as Notes Payable. Those who favor the former title contend that the note is a direct liability of one of the related companies and a secondary liability of the other company, and hence is an obligation different in

nature from a note signed by one company only. Showing the liability as a note payable would not indicate the liability of both companies

The author's opinion is that the Notes Payable title is preferable. In the first place, the consolidated balance sheet is based on the assumption that the related companies are a single organization, and the legal fact of separate corporate entities is ignored. From the viewpoint of the consolidated balance sheet, therefore, a note signed by one company is as much a liability of the organization as a note signed by one company and indorsed by another related company. In the second place, the term Notes Receivable Discounted at once suggests a contingent liability, and since an intercompany note discounted with an outsider is a positive liability, the term is likely to be misleading.

Customers' notes transferred.—If one of the related companies discounts its customers' notes at the bank, no peculiar difficulties arise. Its accounts will contain, for example, the following balances:

Notes Receivable	$20,000 00	
Notes Receivable Discounted		$5,000 00

The consolidated balance sheet will include the $15,000.00 of undiscounted notes, and the $5,000.00 contingent liability on discounted notes will be mentioned in a footnote.

If Company *A* transferred the $5,000.00 of customers' notes to Company *B*, an affiliated company, the accounts of the two companies might contain the following balances:

	Company *A*'s Books	
Notes Receivable	$20,000 00	
Notes Receivable Discounted		$5,000 00
	Company *B*'s Books	
Notes Receivable	$ 5,000 00	

Since the $5,000.00 of discounted notes are carried in the Notes Receivable accounts of both companies, and since the $5,000.00 credit to Notes Receivable Discounted does not represent a contingent liability to outsiders, $5,000.00 of the Notes Receivable balance and the total Notes Receivable Discounted credit balance should be eliminated.

But suppose that Company *B* has rediscounted $3,000.00 of the notes at the bank. The account balances and the eliminations in the working papers will be as follows:

	Company *A*	Company *B*	Eliminations	Consolidated Balance Sheet
Assets				
Notes Receivable	20,000	5,000	5,000	20,000
Liabilities				
Notes Receivable Discounted	5,000	3,000	5,000	3,000

The $5,000.00 contingent liability on the books of Company *A* should be eliminated, with an offsetting elimination against the Notes Receivable on the books of Company *B*. The $3,000 00 contingent liability to outsiders, shown by the books of Company *B*, should be extended to the Consolidated column so that it will not be overlooked when preparing the consolidated balance sheet, the balance sheet should show as an asset the $17,000.00 of notes not discounted with outsiders, and the contingent liability of $3,000.00 to outsiders should be mentioned in a footnote.

Intercompany bond holdings.—When one company holds bonds of a related company, the bonds held as an asset by one company are sometimes offset against the bond liability of the other company, and only the net amount outstanding in the hands of the public is shown as a liability. It is preferable, however, to carry out the balance of the asset account and the balance of the liability account to the balance sheet columns of the working papers, and deduct the intercompany holdings from the total liability in the consolidated balance sheet.

The situation is somewhat analogous to that of a corporation with an authorized bond issue of, say, $500,000 00, of which only $400,000.00 has been issued; such facts should be shown on the balance sheet thus:

Bonds Payable—Authorized	$500,000 00	
Less Treasury Bonds	100,000 00	
Bonds Outstanding		$400,000 00

This procedure is followed because the mortgage is security for the full issue of $500,000.00, and the company has $100,-000 00 of bonds available for issuance or for use as collateral

for short-term loans on notes payable.

Similarly, in the case of intercompany bond holdings, the bonds are virtually treasury bonds of the organization, available for issuance or for use as collateral.

Premium or discount on intercompany bond holdings.—If the company which purchased the bonds paid more or less than par for them, it may have written off the premium or discount immediately. From the individual company standpoint, it is better to charge the Bond Investment account with the purchase cost and to amortize the premium or discount. From the consolidated standpoint, the premium or discount on issuance by one company and the premium or discount on repurchases by another related company should probably be disposed of as they would be if the bonds were issued and retired by the same company.

To illustrate, assume that Company *B* issued bonds of a par value of $100,000.00 at a discount of $2,000 00, and that Company *A* acquired $10,000.00 of the bonds at a discount of $150.00, before any of the discount had been amortized by Company *B*. In the consolidated working papers, the cost of the bonds acquired may be detailed, the discount on purchase may be offset against the discount on sale applicable thereto, and the net discount applicable to the reacquired bonds may be written off against the parent company's surplus, as illustrated below:

	Company *A*	Company *B*	Adjustments Debit	Adjustments Credit	Consolidated
Assets					
Bonds of Company *B*—Par	10,000				10,000
Discount on Purchase	150*		150		
Discount on Issuance of Bonds		2,000		200	1,800
Liabilities					
Bonds Payable		100,000			100,000
Surplus—Company *A*...	5,000		50		4,950

* Red

The adjusting entry writes off $200.00 (or one tenth of the discount on issuance), as applicable to the 10% portion of the bonds reacquired; it also writes off the $150 00 discount on repurchase; and it charges the difference, $50.00, to surplus of the parent company so as to deduct it from the consolidated surplus.

It should be recognized that such an adjustment is con-

servative if it results in a net debit to surplus; but it would not be so conservative if the discount on purchase was greater than the discount on issuance, so that the adjustment involved a net credit to surplus In such a case, it would be more conservative, but perhaps not obligatory, to include the net credit as a deferred credit in the consolidated balance sheet.

A theoretical objection may be raised against the illustrated treatment if the parent company does not own 100% of the stock of the company which issued the bonds and of the company which reacquired them. To present a simple case, assume that Company *A* owns 75% of the stock of Company *B* and 90% of the stock of Company *C*. Company *B* issued \$100,000 00 of bonds at a discount and Company *C* acquired, at a discount of \$4,000.00, all of these bonds at a date when Company *B* was still carrying \$5,000.00 of unamortized discount. The elimination of the discounts by the method illustrated above would result as follows:

	Company *A*	Company *B*	Company *C*	Adjustments Debit	Adjustments Credit	Consolidated Balance Sheet
Assets						
Bonds of Co *B*—Par			100,000			100,000
Discount on Purchase of Bonds			4,000*	4,000		
Discount on Issuance of Bonds		5,000			5,000	
Liabilities						
Bonds Payable		100,000				100,000
Surplus	25,000			1,000		24,000

* Red.

The \$1,000 00 charge against the Surplus of Company *A* is theoretically incorrect because it ignores the minority interests in Companies *B* and *C*. The gradual amortization of the discounts would affect the consolidated Surplus (or Surplus of Company *A*) and the minority interests as follows.

	Total	Surplus of Company *A*	Minority Interests
Discount on Issuance—75% to Company *A* and 25% to Minority of *B* .	\$5,000	\$3,750	\$1,250
Discount on Repurchase—90% to Company *A* and 10% to Minority of *C*	4,000	3,600	400
Net Charges to Surplus and to Minority .	\$1,000	\$ 150	\$ 850

Greater accuracy would therefore result from an adjustment charging the Surplus of Company *A* with only the $150.00 by which its surplus will ultimately be reduced.

The $850.00 difference between the $1,250.00 debit and the $400 00 credit carried to the Consolidated Balance Sheet column, would be shown in the consolidated balance sheet as unamortized discount. The facts would be shown in the consolidated working papers in the manner illustrated below:

	Company *A*	Company *B*	Company *C*	Adjustments Debit	Adjustments Credit	Consolidated Balance Sheet
Assets						
Bonds Owned—Par			100,000			100,000
Discount on Purchase			4,000*	3,600		400*
Discount on Issuance		5,000			3,750	1,250
Liabilities						
Bonds Payable		100,000				100,000
Surplus	25,000			150		24,850

* Red

By this treatment, the following balance sheet shows (in this particular case) unamortized bond discount although no bonds are shown as outstanding

Assets		
Deferred Charge		
Unamortized Discount on Purchase of Treasury Bonds		$850 00
Liabilities and Net Worth		
Fixed Liabilities		
Bonds Payable—Company *B*.	$100,000 00	
Less Intercompany-Owned Bonds	100,000 00	
Outstanding		—

Accrued interest.—If there are intercompany bonds or notes, the balance sheet of the company issuing the paper may show a liability for accrued interest. The company holding the paper should then show an asset of accrued interest receivable. The accrued interest receivable should be offset against the accrued interest payable, and only the net amount due to the outside creditors should be shown as a liability on the consolidated balance sheet.

Declared dividends unpaid.—If the subsidiary has declared dividends which are unpaid at the date of the balance sheet,

its books will show a liability of dividends payable. The parent company's books should show an asset of dividends receivable, which should be offset against the dividends payable. The consolidated balance sheet will then show only the liability for dividends declared and payable to the outside, or minority, stockholders.

Adjusting intercompany accounts.—All intercompany relations should be shown on the books of both related companies, so that the same amounts may be eliminated from the assets and the liabilities. If any intercompany transactions have been recorded on the books of one company only, they should be taken up on the books of the other company before the consolidated balance sheet is prepared.

Goods may have been sold by one company to another immediately prior to the close of the year and recorded in the current account of the selling company, but not taken up on the books of the purchasing company. Before the consolidated balance sheet is prepared, these goods should be added to the purchasing company's inventory and credited to its current account with the selling company.

If services have been rendered by one company and recorded by a charge to the current account and by a credit to income, and if the balance sheet of the other company was drawn up before the transaction was recorded, an adjustment should be made debiting Surplus and crediting the current account of the company rendering the service.

If a company holding bonds of a related company, has not taken up its share of the accrued interest on these bonds, an adjustment should be made debiting Bond Interest Receivable and crediting Surplus.

If the subsidiary has declared a dividend which is unpaid at the date of the balance sheet and which is shown on its books as Dividends Payable, the holding company should take up its share by a debit to Dividends Receivable. The offsetting credit will depend upon the method adopted by the parent company for carrying its investment in the subsidiary stock. If it has taken up its share of subsidiary profits and losses, the offsetting credit for the dividend will be made in the Investment account. If the investment is carried at cost, the offsetting credit will be made to Surplus.

All of these adjustments may be entered in the Adjustment columns in the consolidated working papers.

Illustration.—Company *A* owns 90% of the stock of Company *B* and 95% of the stock of Company *C*. Company *A* has taken up its share of the profits and losses of Company *B*, but is carrying its investment in Company *C* at cost. The balance sheets on December 31, 1933, appear in the working papers on pages 256 and 257. The adjustments and eliminations in the working papers are described below.

Adjustment A.—Company *A* acts as a selling agent for Company *B* on a commission basis. On December 31, 1933, Company *A* charged Company *B* \$1,000 00 as commission on sales made during December, but this commission expense and liability have not been taken up on the books of Company *B* Adjustment A, for \$1,000 00, debits the Surplus account of Company *B* and credits Company *B*'s current account with Company *A*

Adjustment B —Company *A* has taken up its 90% interest in the profits of Company *B* for 1933, by a debit to Investment in Stock of Company *B* and a credit to Surplus. Company *B*'s failure to record the \$1,000 00 commission charge resulted in a \$1,000.00 overstatement of Company *B*'s profit The 90% portion of Company *B*'s profit taken up by Company *A* was therefore overstated \$900 00 This overstatement is corrected by Adjustment B, which debits the Surplus of Company *A* and credits Investment in Stock of Company *B*, \$900 00

Adjustment C.—On December 30, 1933, Company *B* drew a draft on Company *A* for \$3,000 00 and deposited the proceeds Company *B* debited Cash and credited Company *A*. The draft was not presented to Company *A* until January 1934, and the transaction was not recorded by Company *A* before drawing up its balance sheet. Adjustment C, applicable to the accounts of Company *A*, debits the current account of Company *B* and credits Cash, \$3,000.00.

Adjustment D.—Company *B* has declared a dividend of \$3,000-00, of which amount \$2,700.00 represents Company *A*'s 90%. The dividend liability is shown in the balance sheet of Company *B*, but the dividend receivable has not been taken up on the books of Company *A* Adjustment D debits Dividends Receivable, \$2,700 00, since Company *A* has recorded the profits, losses, and past dividends of Company *B* through the Investment account, the offsetting credit of \$2,700 00 is made in the Investment account.

Adjustment E.—Company *C* has declared a dividend of \$2,000.00, of which amount Company *A*'s 95%, or \$1,900 00, has not been taken up on its books, Adjustment E debits Dividends Receivable, \$1,900 00. Since the parent company is carrying its investment in Company *C* at cost and regards dividends as income, this dividend is taken up by a credit to Company *A*'s Surplus

Adjustment F.—Company *A* owns \$40,000 00 par value of bonds issued by Company *B*; the accrued interest, \$1,200 00 (at 6% per annum for six months), has not been taken up on Company *A*'s books This adjustment debits Bond Interest Receivable and credits Company *A*'s Surplus, \$1,200 00

Adjustment G.—The \$40,000.00 par value of bonds owned are carried at \$41,000.00; this latter amount includes \$1,000 00 of unamortized premium on purchase. The balance sheet of Company *B* shows \$2,000 00 of unamortized premium applicable to the total issue of \$50,000 00 of bonds Since Company *A* owns only 90% of the stock of Company *B* and 80% of its bonds, the adjustment of the two premium accounts is made as follows.

Unamortized Premium on Issuance (Books of Company *B*)	1,440 00	
(\$1,440 is 90% of 80% of the \$2,000 balance in the Premium account on *B*'s books)		
Unamortized Premium (Books of Co. *A*)		1,000 00
Surplus of Company *A*		440 00

Adjustment H.—Company *A* is carrying its investment in Company *C* at cost. Company *C* had a surplus of \$30,000 00 on the date at which its stock was acquired by Company *A*. Company *C*'s surplus on December 31, 1933, is \$18,000 00. Company *A*'s 95% of the \$12,000 00 decrease, or \$11,400 00, should be debited to Company *A*'s Surplus and credited to its Investment in the Stock of Company *C*.

Eliminations a *and* b.—Ninety per cent of Company *B*'s capital stock and 90% of its surplus (as adjusted) on December 31, 1933, are eliminated from the parent company's Investment account and from the subsidiary's Stock and Surplus accounts: \$45,000.00 from Capital Stock and \$13,950 00 from Surplus

Eliminations c *and* d.—Ninety-five per cent of Company *C*'s capital stock and 95% of its surplus are eliminated from the parent company's Investment account and from the subsidiary's Capital Stock and Surplus accounts \$38,000 00 from Capital Stock and \$17,100 00 from Surplus

Elimination e.—Intercompany current accounts of Companies

(*Continued on page* 258.)

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Balance Sheet Working Papers
December 31, 1933

		Company *A*	Company *B*	Company *C*	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets								
Investment in Stock of Company *B*—90%		64,000						
Overstatement of *B*'s Profit						900(B)		
Dividends Declared by Company *B*						2,700(D)		
Eliminate Book Value								
Capital Stock—90% of $50,000							45,000(a)	
Surplus (as adjusted) 90% of $15,500							13,950(b)	
Goodwill								1,450(G)
Investment in Stock of Company *C*—95% (at cost)		68,000						
Adjustment—95% of Decrease in Company *C* Surplus								
Surplus at Acquisition.	30,000							
Present Surplus	18,000							
	12,000							
95% of Decrease.						11,400(H)		
Eliminate Book Value								
Capital Stock—95% of $40,000							38,000(c)	
Surplus—95% of $18,000..							17,100(d)	
Goodwill								1,500(G)
Cash		5,000	20,000	3,000		3,000(C)		25,000
Company *B* Current		6,000			3,000(C)		9,000(e)	
Advances to Company *C*		10,000					10 000(f)	
Investment in Bonds of Company *B*·								
Par of Bonds		40,000						40,000
Unamortized Premium		1,000				1,000(G)		
Merchandise Inventory			40,000	62,000				102,000
Notes Receivable				11,000				11,000
Notes Receivable—Company *C*			15,000				15,000(g)	
Plant			75,000	14,000				89,000
Dividends Receivable								
Company *B* Stock—90% of $3,000					2,700(D)		2,700(i)	
Company *C* Stock—95% of $2,000					1,900(E)		1,900(j)	
Bond Interest Receivable (on $40,000 Company *B* Bonds)					1,200(F)		1,200(h)	
		194,000	150,000	90,000			153,850	269,950

Liabilities and Net Worth							
Accounts Payable	25,000	13,000	5,000				43,000
Bond Interest Accrued		1 500				1,200(h)	300
Company A Current		8,000			1,000(A)	9,000(e)	
Notes Receivable—Company C—Discounted		6,000					6,000
Dividends Payable:							
Company B		3,000				2,700(i)	300
Company C			2,000			1,900(j)	100
Advances from Company A			10,000			10,000(f)	
Notes Payable—Company B			15,000			15,000(g)	
Bonds Payable		50,000					50,000
Unamortized Premium on Bonds		2,000		1,440(G)			560
Capital Stock							
Company A	100,000						100,000
Company B		50,000					
Eliminate Company A's 90%						45,000(a)	
Minority Interest—10%							5,000(M)
Company C			40,000				
Eliminate Company A's 95%						38,000(c)	
Minority Interest—5%							2,000(M)
Surplus							
Company A	69,000						
Deduct 90% of Overstatement of Company B's Profit				900(B)			
Add Dividends on Company C Stock.					1,900(E)		
Add Bond Interest Accrued					1,200(F)		
Deduct 95% of Decrease in Company C Surplus Since Acquisition				11,400(H)			
Add Bond Premium Adjustment					440(G)		
Adjusted Balance							60,240(S)
Company B		16,500					
Deduct Commissions				1 000(A)			
Eliminate Company A's 90% of $15,500						13,950(b)	
Minority Interest—10%							1 550(M)
Company C			18,000				
Eliminate Company A's 95%						17,100(d)	
Minority Interest—5%							900(M)
	194,000	150,000	90,000	23,540	23,540	153,850	269,950

A and *B*, \$9,000 00

Elimination f—Advance from Company *A* to Company *C*, \$10,000 00

Elimination g—Company *B* has received \$15,000 00 of notes from Company *C* The intercompany Notes Receivable and Notes Payable accounts are eliminated; \$6,000 00 of the notes have been discounted with outsiders, as shown by the credit balance of the Notes Receivable Discounted account, which is extended to the Consolidated column

Elimination h—Accrued bond interest, \$1,200 00, payable by Company *B* to Company *A*.

Eliminations i *and* j—Intercompany dividends.

The consolidated balance sheet appears below.

COMPANY *A* AND SUBSIDIARY COMPANIES *B* AND *C*
Consolidated Balance Sheet
December 31, 1933

Assets		
Current Assets		
Cash	\$ 25,000 00	
Notes Receivable	11,000 00	
Merchandise Inventory	102,000 00	\$138,000 00
Fixed Assets		
Plant	\$ 89,000 00	
Goodwill	2,950 00	91,950 00
		\$229,950 00
Liabilities and Net Worth		
Current Liabilities		
Accounts Payable	\$ 43,000 00	
Notes Payable	6,000 00	
Accrued Bond Interest	300 00	
Dividends Payable	400 00	\$ 49,700 00
Fixed Liabilities.		
Bonds Payable	\$ 50,000 00	
Less Treasury Bonds	40,000 00	10,000 00
Unamortized Bond Premium		560 00
Minority Interests		
Company *B*—10%	\$ 6,550 00	
Company *C*—5%	2,900 00	9,450 00
Net Worth:		
Capital Stock	\$100,000 00	
Surplus	60,240 00	160,240 00
		\$229,950 00

Minority column in working papers.—If there are a number of subsidiaries, the liability and net worth section of the working papers may be somewhat simplified by including a Minority column, as illustrated on page 259.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Consolidated Balance Sheet Working Papers—(*Continued*)

December 31, 1933

Liabilities and Net Worth	Company *A*	Company *B*	Company *C*	Adjustments Debit	Adjustments Credit	Eliminations	Minority	Consolidated Balance Sheet
Adjustment column totals forward				8,800	19 000			
Accounts Payable	25,000	13,000	5,000					43,000
Bond Interest Accrued		1,500				1,200(h)		300
Company *A* Current		8,000			1,000(A)	9 000(e)		
Notes Receivable—Company *C*—Discounted		6,000						6,000
Dividends Payable								
Company *B*		3 000				2,700(i)		300
Company *C*			2,000			1,900(j)		100
Advances from Company *A*			10,000			10,000(f)		
Notes Payable—Company *B*			15 000			15,000(g)		
Bonds Payable		50,000						50,000
Unamortized Premium on Bonds		2,000		1,440(G)				560
Capital Stock								
Company *A*	100,000							100,000
Company *B*		50,000				45,000(a)	5 000(B)	
Company *C*			40,000			38,000(c)	2,000(C)	
Surplus								
Company *A*	69 000							
Deduct 90 % of Overstatement in Co *B* Profit				900(B)				
Add Dividends on Company *C* Stock					1,900(E)			
Add Bond Interest Accrued					1,200(F)			
Deduct 95 % of Decrease in Company *C* Surplus Since Acquisition				11,400(H)				
Add Bond Premium Adjustment					440(G)			
Adjusted Balance								60,240(S)
Company *B*		16,500		1,000(A)		13,950(b)	1,550(B)	
Company *C*			18,000			17,100(d)	900(C)	
Total Minority Interest							9,450	9,450(M)
	194,000	150,000	90,000	23,540	23,540	153,850		269,950

CHAPTER 47

PARENT AND SUBSIDIARY ACCOUNTING (Concluded)
MISCELLANEOUS TOPICS

Minority interest; subsidiary deficit.—In all working papers thus far prepared, the minority interest has been shown at an amount equal to the minority's share of the subsidiary's stock plus its share of the subsidiary's surplus, or minus its share of the subsidiary's deficit, at the date of the consolidated balance sheet; in other words, the minority interest has been shown at the book value of the minority stock. This treatment is shown by the following illustration, in which it is assumed that the parent company has taken up its share of subsidiary gains and losses, the minority interest is reduced by its share of the subsidiary's deficit.

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Co. *S* (90%)	38,000			
Eliminate Book Value				
Capital Stock—90% of $50,000 00			45,000	
Deficit—90% of $10,000 00			9,000*	
Goodwill				2,000G
Cash	22,000	20,000		42,000
Merchandise	80,000	45,000		125,000
	140,000	65,000	36,000	169,000
Liabilities				
Accounts Payable	15,000	25,000		40,000
Capital Stock				
Company *P*	100,000			100,000
Company *S*		50,000		
Eliminate 90%			45,000	
Minority—10%				5,000M
Surplus (Deficit*)				
Company *P*	25,000			25,000S
Company *S*		10,000*		
Eliminate 90%			9,000*	
Minority—10%				1,000*M
	140,000	65,000	36,000	169,000

Some accountants would show the minority interest at the par of the stock, without deducting the minority's pro-rata share of the deficit.

If the minority's interest is not to be diminished by its \$1,000.00 share of the subsidiary's deficit, the \$1,000.00 shown in the foregoing working papers as a deduction from the minority's interest would be deducted from the parent company's surplus, as a result, the minority interest would be shown at \$5,000 00, the par of the stock held by the minority, and the consolidated surplus would be shown at \$24,000 00

Accountants who follow this latter method do so on the theory that, while the minority will share in profits, the parent company will be obliged to "absorb the losses" of the subsidiary in order to hold the organization together.

Although it is true that the subsidiary may be such an essential part of the organization that the parent company will consider it expedient to retain its ownership of the stock in spite of these losses, it does not seem necessary for the parent company to assume the magnanimous position of allowing the minority stockholders to share in subsidiary profits while relieving them from any reduction in the book value of their stock caused by subsidiary losses. As long as the subsidiary is able to pay its debts, the losses merely reduce the value of all shares proportionately. If the subsidiary becomes unable to pay its debts, the parent company may advance the funds necessary to prevent the creditors from forcing the subsidiary into liquidation.

As an extreme illustration, let us assume that the subsidiary losses have resulted in a deficit equal to the capital stock, and that the parent company has not seen fit to make advances in order to keep the business out of the hands of the creditors. The creditors therefore take possession, and the parent company loses its stock and the minority stockholders lose theirs. But the parent company does not bear the minority's loss.

On the other hand, assume that the parent company has made advances, so that the subsidiary's condition is as follows:

Subsidiary Balance Sheet

Net Assets	\$ 50,000 00	Advances from Parent Co	\$ 50,000 00
Deficit	100,000 00	Capital Stock	100,000 00

The parent company may now take over the assets of the subsidiary in settlement of the advances; again the parent company loses its portion of the stock and the minority stockholders lose theirs.

The purpose of a balance sheet is to show the present financial condition of a business organization. It appears that a consolidated balance sheet fulfills this purpose if it shows all of the assets and liabilities of the combined companies, and the actual present interests of the parent company and of the minority stockholders in these net assets. Regardless of what the parent company may have to do in the future (and it is difficult to see how it can be obliged to bear more than its share of the loss), it cannot be denied that the present book value of the minority's interest in the net assets of the organization is measured by the minority's percentage of the subsidiary's capital stock and surplus or deficit.

Stock dividends.—To illustrate some of the problems which may arise in connection with stock dividends paid by a subsidiary, assume that Company *S* had a capital stock of \$100,000 00 and a surplus of \$50,000 00 on January 1, 1934, and that Company *P* purchased 90% of the stock on that date. The book value of the stock acquired was 90% of \$150,000.00, or \$135,000.00, and the purchase price was \$140,000.00. Hence there was a goodwill payment of \$5,000.00. During 1934, the subsidiary made a profit of \$25,000 00, and issued a stock dividend of \$40,000.00, of which Company *P* received stock of a par value of \$36,000.00. Various conditions with respect to the parent company's method of accounting may be encountered, in all cases, it will be assumed that the parent company has no surplus from its own operations.

First, assume that the parent company takes up its \$22,500.00 share of the profit of Company *S* for 1934 by a debit to the Investment account and a credit to Surplus, and that no entry is made for the stock dividend, as it represents merely a transfer of a part of the subsidiary's net worth from its Surplus account to its Capital Stock account, with no effect upon the value of Company *P*'s investment. In the author's opinion, this is the correct procedure. Eliminations will be made in the consolidated working papers as follows:

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company S	162,500			
Eliminate book value				
Capital Stock—90% of $140,000 00			126,000	
Surplus—90% of $35,000 00			31,500	
Goodwill				5,000G
Liabilities				
Capital Stock—Company S		140,000	126,000	14,000M
Surplus.				
Company P	22,500			22,500S
Company S		35,000	31,500	3,500M

Note that the goodwill is $5,000 00, the minority interest is $17,500.00, and the consolidated surplus is $22,500.00.

Second, let us assume that the parent company is carrying the investment at cost, and has made no entry for the stock dividend. It will be necessary to make an adjustment of Company P's Investment and Surplus accounts, by taking up its $22,500.00 share of the profit of Company S; eliminations can then be made as in the preceding case.

	Company P	Company S	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Investment in Stock of Co S—90% .	140,000					
Add 90% of S's Net Profit since Acquistion			22,500A			
Eliminate Book Value.						
Capital Stock—90%					126,000	
Surplus—90%					31,500	
Goodwill						5,000G
Liabilities						
Capital Stock—Co S		140,000			126,000	14,000M
Surplus						
Company P	—					
Add 90% of Company S Profit				22,500A		22,500S
Company S		35,000			31,500	3,500M

Note that the goodwill, the minority interest, and the consolidated surplus are the same as in the preceding case.

Third, let us assume that the parent company has not taken up its $22,500.00 portion of the profit of the subsidiary, but has taken up the stock dividend by a debit to the Investment account and a credit to Surplus. The Investment and Surplus accounts should be reduced by 90% of the excess of the stock dividend over the profits of Company *S*. Eliminations may then be made as shown in the following working papers:

	Company *P*	Company *S*	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Investment in Stock of Co *S*	176,000					
Adjustment						
Stock Dividend 40,000						
Profit of Co *S* 25,000						
90% of Excess 15,000				13,500A		
Eliminate Book Value:						
Capital Stock—90%					126,000	
Surplus—90%					31,500	
Goodwill						5,000G
Liabilities						
Capital Stock—Co *S*		140,000			126,000	14,000M
Surplus						
Company *P*	36,000					
Adjustment—as above			13,500A			
Adjusted Balance						22,500S
Company *S*		35,000			31,500	3,500M

Note that the goodwill, the minority interest, and the consolidated surplus obtained are the same as those in the preceding cases.

Holdings of no-par stock.—The method of making eliminations is not affected by the fact that the subsidiary's stock is without par value. The book value of the parent company's ownings is determined by ascertaining the per cent of subsidiary stock owned, and by multiplying the subsidiary's Capital Stock and Surplus accounts by this per cent. To

illustrate, assume that the subsidiary has an issue of 3,000 shares of no-par value stock, for which $250,000 00 was received and credited to Capital Stock. The subsidiary also has a surplus of $60,000.00. The parent company acquires 2,400 shares at a cost of $260,000.00.

Consolidated Working Papers

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company S (80 %)				
2,400 Shares of a Total Issue of 3,000	260,000			
Eliminate Book Value				
Capital Stock—80 % of $250,000 00			200,000	
Surplus—80 % of $60,000 00			48,000	
Goodwill				12,000G
Liabilities				
Capital Stock—Company S		250,000		
Eliminate Parent Company's 80 %			200,000	
Minority—20 %				50,000M
Surplus—Company S		60,000		
Eliminate Parent Company's 80 %			48,000	
Minority—20 %				12,000M

Holdings of both common and preferred stock.—When the parent company owns both common and preferred stock, it may be necessary to divide the subsidiary surplus into the portions applicable to the two classes of stock, in order to determine their book values and to make proper eliminations. In making this division, it is necessary to consider whether the subsidiary's preferred stock is cumulative or non-cumulative, and participating or non-participating, and whether there are any cumulative dividends in arrears. In the following illustrations, it is assumed that the parent company bought 80% of the preferred stock for $48,000.00 (par value $40,000.00) and 90% of the common stock for $106,000.00 (par value $90,000.00). The subsidiary had no surplus at the date of acquisition. The total goodwill was therefore $8,000.00 + $16,000.00, or $24,000.00. At the end of one year the subsidiary had made a profit of $18,000.00.

First, it is assumed that the preferred stock is non-cumulative and non-participating, and that the year's dividend of

$3,000 00 has been paid on the preferred stock. The preferred therefore has no further claim on the surplus of the subsidiary, which was reduced to $15,000.00 by the payment of the preferred dividend, and the entire $15,000.00 is applicable to the common stock. The parent company should have taken up 90% of this amount, or $13,500.00, as well as the $2,400.00 dividend on its holdings of preferred stock.

Consolidated Working Papers

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Preferred Stock of Company *S* (80%)	48,000			
Eliminate Book Value				
Capital Stock—80% of $50,000 00			40,000	
Goodwill				8,000G
Investment in Common Stock of Company *S* (90%)	119,500			
Eliminate Book Value.				
Capital Stock—90% of $100,000 00			90,000	
Surplus—90% of $15,000 00			13,500	
Goodwill				16,000G
Liabilities and Net Worth				
Capital Stock Preferred—Company *S*		50,000		
Eliminate Parent Company's 80%			40,000	
Minority—20%				10,000M
Capital Stock Common—Company *S*		100,000		
Eliminate Parent Company's 90%			90,000	
Minority—10%				10,000M
Surplus—Company *S* (Applicable to Common Stock)		15,000		
Eliminate Parent Company's 90%			13,500	
Minority—10%				1,500M
Surplus—Company *P*	15,900			15,900S

Second, it is assumed that the preferred stock is cumulative and non-participating, and that there are no dividends in arrears. The rights of the preferred stockholders in the subsidiary surplus have thus been satisfied by the payment of the dividend, and the entire surplus is applicable to the common stock. Therefore the working papers would be identical with those just shown.

Third, it is assumed that the preferred stock is cumulative but non-participating, and that one year's dividend of 6% is in arrears. The surplus is therefore $18,000.00. As the

profits have been earned, the preferred stockholders have a claim against them to the extent of $3,000 00, and the parent company would be justified in taking up its 80% thereof by a debit to the preferred stock investment account and a credit to earnings. The subsidiary surplus is divided into two parts. $3,000.00 applicable to preferred stock, and $15,000.00 applicable to common stock.

Consolidated Working Papers

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Preferred Stock of Company S (80%)	50,400			
Eliminate Book Value				
Capital Stock—80% of $50,000 00			40,000	
Surplus—80% of $3,000 00			2,400	
Goodwill				8,000G
Investment in Common Stock of Company S (90%) ..	119,500			
Eliminate Book Value:				
Capital Stock—90% of $100,000 00			90,000	
Surplus—90% of $15,000.00			13,500	
Goodwill				16,000G
Liabilities and Net Worth				
Capital Stock—Preferred—Company S		50,000		
Eliminate Parent Company's 80%			40,000	
Minority—20%				10,000M
Capital Stock—Common—Company S		100,000		
Eliminate Parent Company's 90%			90,000	
Minority—10%				10,000M
Surplus—Company S (Applicable to Preferred Stock)		3,000		
Eliminate Parent Company's 80%			2,400	
Minority—20%				600M
Surplus—Company S (Applicable to Common Stock)		15,000		
Eliminate Parent Company's 90%			13,500	
Minority—10%				1,500M
Surplus—Company P ($2,400 + $13,500)	15,900			15,900S

Fourth, it is assumed that the preferred stock is cumulative and participating, and that no dividends have been paid on either preferred or common stock. Since the preferred stock is participating, it shares pro rata with the common stock in the surplus. Therefore $6,000.00 of the earnings are applicable to the preferred and $12,000.00 are applicable to the

common. The parent company would be justified in making the following entry.

Investment in Preferred Stock of Co *S* (80% of $6,000 00)	4,800	
Investment in Common Stock of Co *S* (90% of $12,000 00)	10,800	
Surplus		15,600
To take up our share of the earnings of Company *S*		

The goodwill, minority interest, and consolidated surplus are computed below

Consolidated Working Papers

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Preferred Stock of Company *S* (80%)	52,800			
Eliminate Book Value				
Capital Stock—80% of $50,000 00			40,000	
Surplus—80% of $6,000 00			4,800	
Goodwill				8,000G
Investment in Common Stock of Company *S* (90%)	116,800			
Eliminate Book Value				
Capital Stock—90% of $100,000 00			90,000	
Surplus—90% of $12,000 00			10,800	
Goodwill				16,000G
Liabilities and Net Worth				
Capital Stock Preferred—Company *S*		50,000		
Eliminate Parent Company's 80%			40,000	
Minority—20%				10,000M
Capital Stock Common—Company *S*		100,000		
Eliminate Parent Company's 90%			90,000	
Minority—10%				10,000M
Surplus—Company *S*		18,000		
Applicable to Preferred—$6,000 00				
Eliminate Parent Company's 80%			4,800	
Minority—20%				1,200M
Applicable to Common—$12,000 00				
Eliminate Parent Company's 90%			10,800	
Minority—10%				1,200M
Surplus—Company *P*	15,600			15,600S

Arbitrary entries in Investment account.—In some instances, a parent company will not take up the profits and losses of its subsidiary but will, at intervals, make entries of an arbitrary amount to raise or lower the balance of the Investment account to an amount regarded as representing

the value of the stock owned. If the entry adjusts the balance of the account to the book value of the stock, as measured by the Capital Stock and Surplus accounts of the subsidiary, the elimination of book value at the balance sheet date will have the effect of eliminating from the consolidated balance sheet any goodwill in the stock purchase. To illustrate, Company P purchased 90% of the stock of Company S, paying \$115,000.00 therefor. At the date of acquisition, Company P had a capital stock of \$100,000.00 and a surplus of \$20,000 00, so that its book value was \$120,000.00. As 90% of \$120,000.00 is \$108,000.00, there was a goodwill element of \$7,000 00 in the purchase. The investment was carried at cost until the end of the year, at which time the subsidiary had a surplus of \$50,000.00, and a total net worth of \$150,000.00. As 90% of this amount is \$135,000.00, Company P erroneously made an entry debiting the Investment account and crediting Surplus with \$20,000.00, to raise the balance of the Investment account from \$115,000.00 to \$135,000 00. It will be noted from the following working papers that the \$7,000.00 goodwill payment was thus, in effect, written off.

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Investment in Stock of Company S (90%)	135,000			
Eliminate Book Value.				
Capital Stock—90% of \$100,000 00			90,000	
Surplus—90% of \$50,000 00			45,000	
Liabilities				
Capital Stock—Company S		100,000		
Eliminate Parent Company's 90%			90,000	
Minority Interest—10%				10,000M
Surplus:				
Company P ..	20,000			20,000S
Company S		50,000		
Eliminate Parent Company's 90%			45,000	
Minority Interest—10%.				5,000M

These working papers show that the goodwill of \$7,000.00 has been written off and that the parent company's surplus is only \$20,000.00, although it should be 90% of the subsidiary's \$30,000 00 profits for the year, or \$27,000.00. Because such arbitrary entries produce erroneous results, it is advisable to

reverse them by adjusting entries in the consolidated working papers, and proceed with the eliminations in the usual manner.

Book value at acquistion in excess of cost.—If the price paid by a parent company in acquiring the stock of a subsidiary is in excess of the book value of the stock at the date of acquisition, the excess is included in the consolidated balance sheet as goodwill. What treatment should be given to the opposite condition: an excess of book value at acquisition over purchase price? Let us consider a number of cases

(1) If there is a Goodwill account on the books of the subsidiary whose stock is acquired at less than book value, the excess of the book value of the stock over its purchase price should be deducted from the goodwill of that subsidiary. Obviously, the parent company, in paying less than book value for the stock, refused to recognize the propriety of the stated book value of the goodwill.

(2) If there is no goodwill on the books of the subsidiary, but if some of its assets are overvalued and the parent company paid less than book value for the stock because of the asset overvaluation, the excess of book value over cost may be deducted in the consolidated working papers from the overvalued assets.

(3) If there is no goodwill on the books of the subsidiary whose stock was acquired at less than book value, if none of its assets are overvalued, and if there is no goodwill elsewhere in the consolidated working papers, the excess of book value over cost may be shown in the consolidated balance sheet as Capital Surplus, Surplus Arising from Consolidation, or under some other descriptive title in the surplus section.

(4) If there is no goodwill on the books of the subsidiary whose stock was acquired at less than book value, and if none of its assets are overvalued, but if goodwill items appear in the balance sheets of the other companies or arose from the purchase of the stock of other subsidiaries, it is customary to deduct the excess of book value over cost from goodwill appearing anywhere in the consolidated working papers Although this practice is customary, it does not seem to be theoretically correct, for the following reasons:

(a) It is difficult to see how the purchase of the stock of a subsidiary at less than book value can reduce the

goodwill of the consolidation, unless that subsidiary is making very small profits or is incurring losses which will reduce the consolidated earnings. But even in that case,

(b) It is a well-recognized accounting principle that, while the real value of a company's goodwill is dependent upon its earnings, the amount which may be shown in its balance sheet as goodwill is determined by the price paid for goodwill. In other words, goodwill once paid for may be retained in the balance sheet regardless of subsequent earnings. This principle would appear to sanction retaining in the consolidated balance sheet all goodwill paid for by the parent company or by other subsidiaries and appearing in their balance sheets, or paid for by the parent company in acquiring the stock of other subsidiaries, regardless of the meager earnings or the losses of a subsidiary acquired at less than book value. Moreover,

(c) While it may be regarded as conservative to offset an excess of book value over cost against any goodwill appearing in the consolidated working papers, the accountant should recognize that, in doing so, he is in effect writing off goodwill presumably paid for in other transactions. If such a conservative action is to be taken, it would seem to require the authorization of the directors of the parent company.

For these reasons the author believes that, if a subsidiary with no Goodwill account and no overvalued assets is acquired at less than book value, the excess of book value over cost should not be offset against goodwill appearing elsewhere in the consolidated working papers, but should be set up as Capital Surplus or Surplus Arising from Consolidation.

Profits in inventories.—When one company sells goods at a profit to a related company, the minority stockholders of the selling company have a right to consider that the profit has been realized, since the goods have been sold to a company in which they have no interest. The parent company, which controls the organization and looks upon the

various subsidiaries virtually as departments of the organization, should not regard the profit as realized until the goods have been resold to a purchaser outside of the organization

Therefore, if, at the date of the consolidated balance sheet, the inventories of any of the related companies contain goods that were purchased from other related companies after the selling companies' stocks were acquired by the parent company, the inventories should be analyzed to determine how much of their present carrying value is composed of profits added by the selling companies. After this unrealized profit has been ascertained, a reserve should be created, out of the parent company's surplus, for the parent company's portion of such unrealized profit.

To illustrate, it is assumed that Company *P* owns 90% of the stock of Company *S*. Company *S* has sold goods to Company *P* during the year at a profit, and the inventory of Company *P* at the end of the year includes goods purchased from Company *S* on which the latter company made a profit of $1,000.00 Since Company *P*, in taking up its share of the profits of Company *S*, has taken up $900.00 of this profit, a reserve should be created by deducting $900.00 from the parent company's surplus and transferring it to a reserve.

The reserve for unrealized profits may be shown on the consolidated balance sheet as a deduction from the inventories Inventories should be priced at cost (unless market is lower), and cost should not include the organization's share of unrealized profits resulting from transfers from one related company to another. Or the inventories may be shown at the net amount after the intercompany profit has been deducted, without showing the reserve on the balance sheet.

Conflicting opinions concerning amount of reserve.—Some accountants set up a reserve for the entire amount of the unrealized profit instead of for the parent company's proportion thereof. But this appears incorrect because the minority stockholders are outsiders, and their share of the profit is earned as soon as the goods are sold to another corporation in which they have no interest.

Thus, if Company *P* owns 90% of the stock of Company *S*,

and if Company *P*'s inventory contains goods purchased from Company *S* on which Company *S* made a profit of $10,000.00, it would appear that the reserve need be only 90% of $10,000.00, or $9,000.00, because. First, the minority's 10% of the profit is realized so far as the minority stockholders are concerned, since the goods have been sold to a company in which they have no stock interest; and second, since the parent company has taken up only 90% of the subsidiary's total profit, it has thus taken into its surplus only $9,000.00 of profit derived from the intercompany transaction; it should therefore not be obliged to reduce its surplus $10,000.00 by setting up a reserve for the entire intercompany profit.

But assume that Company *P* sold the goods to Company *S*, making a $10,000 00 profit. What should be the amount of the reserve? It might appear that, since there is a 10% minority interest in Company *S*, 10% of the profit could be regarded as realized in the sense that Company *P* sold 10% of the goods to the minority interest in Company *S*. However, Company *P*'s surplus has been increased by the entire $10,000.00 profit, unless the parent company is obliged to remove the entire $10,000.00 from its surplus by the creation of a reserve, the parent company would be in a position arbitrarily to inflate its profits by forcing the subsidiary to purchase merchandise at such a profit as the parent company might dictate.

Care must be exercised in determining the amount of the reserve if the parent company owns several subsidiaries. To illustrate, assume that Company *P* owns 90% of the stock of Company *S* and 75% of the stock of Company *T*. If Company *S*'s inventory contains goods on which Company *T* made a $10,000.00 profit, the reserve should be 75% of $10,000.00, because the parent company takes up 75% of the profit of Company *T*. On the other hand, if Company *T* holds merchandise which it has purchased from Company *S*, the reserve should be 90% of the profit, because the parent company takes up 90% of the profit of Company *S*.

The situation may be further complicated by assuming that Company *P* owns merchandise that it bought from Company *S*, which made a profit of $10,000.00 on the sale to Company *P*, furthermore, Company *S* acquired the merchandise from Company *T*, which made a profit of $6,000.00

on the sale. Since Company P owns 90% of the stock of Company S and 75% of the stock of Company T, the reserve should be.

90% of $10,000 00 profit made by S on sale to P	$ 9,000 00
75% of $6,000 00 profit made by T on sale to S	4,500 00
Total reserve	$13,500 00

Profits from sales before stock acquisition.—If the inventories contain goods which were sold by one company to another before the parent company acquired control of the selling company, no reserve should be created, because the parent company did not take up a share of such profits and should not be required to reduce its surplus by an amount which has not been included therein. The companies were not related when the sale took place, and hence the profit was not intercompany profit.

Intercompany profits on construction.—When one company produces fixed assets for another related company and makes a profit on the construction, a reserve should be created to eliminate the parent company's proportion of such profit and reduce the fixed assets to cost. As already shown in connection with inventories, the cost may properly include the profit applicable to the minority interest of the selling company. The parent company cannot equitably ask the minority stockholders of its subsidiary to forego their share of the profit on work done for a company in which they have no interest; nor can the parent company reasonably be called upon to set up a $10,000.00 reserve for the total profit made by a subsidiary, if the parent company owns only 90% of the stock and has taken up only $9,000.00 of the profit on the construction.

To illustrate, assume that Company P owns 90% of the stock of Company S. After the combination is effected, the latter company sells fixed assets to Company P at a profit of $1,000.00. At the end of the year, Company P will take up $900.00 of the profit which Company S made on the sale, and it should therefore create a reserve of $900.00 for unrealized profit in fixed assets.

The question of intercompany profits on the construction of fixed assets is a much more complex one than that of inter-

company profits in inventories. Intercompany profits in inventories will become realized profits when the goods are sold to outsiders, and the reserve will disappear when the goods are disposed of. In the case of fixed assets, however, the property is not ordinarily disposed of through sale, and it might seem, therefore, that the reserve should be kept intact and appear as a deduction on the balance sheet at the original amount so long as the fixed assets are owned. But since fixed assets are virtually disposed of gradually through use and depreciation, it seems logical to reduce the depreciation charges to a basis of intercompany cost. This view is strengthened when it is remembered that depreciation should be based on cost, which cannot be two different things for two different purposes. If cost for balance sheet purposes is purchase price less intercompany profit, then cost for depreciation purposes should be the same amount. If manufacturing expense is charged with depreciation on the intercompany purchase price, the costs of manufacture are overstated, because depreciation is computed on a value in excess of the cost to the organization.

It is not difficult to put this theory into practice if the parent company owns the asset on which the intercompany profit was made. Two methods are available:

(1) The parent company may write down the asset to intercompany cost by debiting Surplus and crediting the asset account instead of crediting a reserve for intercompany profit. Depreciation will then be computed on the carrying value of the property as shown by the asset account.

(2) The parent company may carry the reserve and compute depreciation on the carrying value of the property as measured by the debit balance in the asset account minus the credit balance in the reserve for intercompany profit.

To illustrate, assume that Company *P* owns 90% of the stock of Company *S*, and that, during the year, Company *S* manufactured for Company *P* machinery which it delivered to Company *P* at the end of the year, billing that company $25,000.00. The profit made by Company *S* was $5,000.00. Company *P*, in taking up its share of the profits of Company

S, took up 90% of this amount, or $4,500.00. If Company *P* follows the first method suggested above, it will debit its Surplus and credit the Machinery account $4,500.00, thus reducing the asset to $20,500 00, which is intercompany cost after the minority stockholders of Company *S* are allowed their 10% of the profit. Depreciation will then be computed on $20,500.00. If Company *P* follows the second method suggested above, it will debit Surplus and credit a reserve for unrealized profit in fixed assets, $4,500.00; it will then compute depreciation on the $25,000.00 balance in the asset account minus the $4,500.00 balance in the reserve for intercompany profit.

The theory is not so easily put into practice if the company making the profit sold the assets to another affiliated company instead of to the parent company. To illustrate, assume that Company *P* owns 90% of the stock of Company *S* and 80% of the stock of Company *T*. Company *T* has sold to Company *S* for $50,000.00 machinery which cost $40,000.00. When Company *P* takes up its 80% of the profits of Company *T*, it takes up $8,000.00 of this unrealized intercompany profit and should therefore create a reserve of $8,000.00. The first method suggested above is not practicable in this case; the asset is on the books of Company *S* while the unrealized profit reserve must be set up out of the surplus of Company *P*. It is impossible to write down the asset on the books of Company *S*, because such a write-down would involve a debit to the surplus of Company *S*, a procedure which would be improper because the intercompany profit went into *P*'s surplus. The asset will therefore go on to the books of Company *S* at $50,000.00, and the reserve will be set up at $8,000.00 on *P*'s books.

For consolidated balance sheet purposes, the cost of the asset was $42,000.00, but Company *S* will compute depreciation on a basis of $50,000.00, which was the cost to Company *S* as a separate corporation. If the rate of depreciation is 10%, the depreciation on a straight-line basis will be $5,000 00 annually. But, from the standpoint of the organization as a unit, Company *S* has overstated its manufacturing costs by 10% of $8,000.00, or $800.00, and if all of the goods manufactured by Company *S* during the year have been sold outside the organization, the profits of the organiza-

tion have been understated $800.00. In other words, since depreciation of machinery used in manufacturing is a manufacturing expense, 10% of the machinery (from an accounting standpoint) has now been converted into finished goods and sold. Ten per cent of the unrealized profit on fixed assets is thereby realized by converting the fixed assets into finished goods and selling them. At the end of the year, the parent company would therefore be justified, in the author's opinion, in transferring 10% of the $8,000.00 reserve, or $800.00, to its Surplus account, thus reducing the reserve on its books to $7,200.00. The asset would then appear on the consolidated balance sheet as follows:

Machinery		$50,000
Less: Reserve for Intercompany Profit on Construction	$7,200	
Reserve for Depreciation	5,000	12,200
Depreciated Cost		$37,800

This treatment seems theoretically correct, since it produces the same result that would be produced by either the first or second method if the parent company had itself purchased the asset from Company *T*. In that case, Company *P* would carry the asset on its own books at $42,000.00. The depreciation at 10% would be $4,200 00, and the carrying value at the end of the first year would be:

Machinery (at Cost less Intercompany Profit)	$42,000 00
Less Depreciation	4,200 00
Depreciated Cost	$37,800 00

There is a still further complication if the finished goods have not been sold or have been sold to another company within the organization. In such an instance the intercompany profit on construction has merely been converted into an unrealized intercompany profit in inventories, for which a proper reserve should be created.

Illustration of working papers.—The treatment of intercompany profits in the consolidated balance sheet working papers will depend upon whether or not reserves have been set up on the books of the parent company. If they have been set up, they will appear in the balance sheet of the parent company and will be merely carried out to the Consolidated Balance Sheet columns. If they have not been set up on

the parent company's books, they will be created by deductions from the parent company's surplus, as illustrated below:

Consolidated Balance Sheet Working Papers

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Surplus—Company *P*	40,000			
Reserve for Intercompany Profit in Inventories				900R
Reserve for Intercompany Profit in Construction				4,500R
Surplus				34,600S

Stock acquired from the subsidiary.—In all illustrations heretofore presented, it has been assumed that the parent company acquired its stock by purchase from former stockholders of the subsidiary. Sometimes the stock is acquired directly from the subsidiary. The difference in the method of acquiring the stock has no effect on the method of making eliminations from the Investment account If the Investment account has been charged with subsidiary profits and credited with subsidiary losses and dividends, the book value of the stock at the date of the balance sheet should be eliminated. If the investment is carried at cost, the parent company's Investment and Surplus accounts will be subject to the customary adjustment for the parent company's percentage of any increase or decrease in subsidiary surplus since the date of acquisition.

But it should be understood that the subsidiary surplus at the date of acquisition includes any premium paid by the parent company in acquiring the subsidiary stock. To illustrate, assume that Company *A* had an issue of \$50,000.00 of stock, all of which was outstanding in the hands of individual owners, and a surplus of \$10,000.00. An additional issue of \$70,000.00 was authorized and sold at 150, or for \$105,000.00, to Company *B*, which thus became Company *A*'s parent. If the parent company carries the investment at cost, adjustments for an increase or a decrease in subsidiary surplus should be based on a surplus of \$45,000 00 at acquisition, including the \$10,000.00 surplus before the issuance of the new stock and the \$35,000.00 premium on the new stock.

When to consolidate.—A company may be regarded as a subsidiary if a mere controlling interest in its stock is owned by another company. But a 51% interest is usually not regarded as sufficient to justify including the accounts of the subsidiary in a consolidated balance sheet.

A consolidated balance sheet is based upon the assumption that the Investment account on the parent company's books represents the net assets of the subsidiary If the parent company owns 95% of the subsidiary stock, there is only a 5% error in the assumption, and this error is corrected by including the 5% minority interest on the liability side of the balance sheet. But if there is a 49% minority interest, the error in the assumption is virtually as great as the truth in the assumption; with so great a degree of error, it is not regarded as proper to take up the subsidiary's net assets in place of the Investment account.

Unfortunately, there is no well-accepted rule concerning the percentage of ownership required to justify the inclusion of a subsidiary's accounts in a consolidated balance sheet. Some accountants appear to believe that a 60% interest is sufficient; others regard a 75% or an 80% interest as a minimum. In the author's opinion, the size of the subsidiary should also be considered. If the subsidiary is so small that a 40% minority interest is insignificant in comparison with the net worth of the parent company, there appears to be no serious objection to consolidating its accounts. On the other hand, a 25% minority interest in a large subsidiary might be so large in proportion to the net worth of the parent that the propriety of consolidating its accounts would be doubtful.

Investments carried at cost—alternative working paper procedure.—Assume that Company *P* acquired 90% of the stock of Company *S*; at the date of acquisition, the subsidiary had \$100,000.00 of capital stock and \$50,000.00 of surplus; the acquired stock therefore had a book value of 90% of \$150,000.00, or \$135,000.00, the purchase price was \$140,000.00. The parent company carries the investment at cost. A consolidated balance sheet is to be prepared at a date subsequent to acquisition, when the subsidiary has a surplus of \$60,000.00. The parent company has

$100,000.00 of surplus from its own operations.

The procedure explained in Chapter 45 for preparing a consolidated balance sheet when the investment is carried at cost, may be summarized as follows:

Adjust the parent company's Investment and Surplus accounts by taking up its percentage of the increase or decrease in the subsidiary's surplus since the date of acquisition.

Eliminate the parent company's percentage of the subsidiary's capital stock and surplus as of the date of the consolidated balance sheet.

These adjustments and eliminations are made as follows:

	Company P	Company S	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Investment in Company S—at cost	140,000					
Adjustment—90% of Increase in Surplus of Company S since Acquisition			9,000A			
Eliminate Present Book Value.						
Capital Stock—90% of $100,000 00					90,000	
Surplus—90% of $60,000 00 ..					54,000	
Goodwill						5,000G
Liabilities						
Capital Stock:						
Company P . .	500,000					500,000
Company S		100,000				
Eliminate Company P's 90%					90,000	
Minority—10% .						10,000M
Surplus						
Company P	100,000					
Adjustment—as above				9,000A		
Adjusted Balance						109,000S
Company S		60,000				
Eliminate Company P's 90% . .					54,000	
Minority—10%						6,000M

Note that the goodwill is $5,000.00, the minority interest

is $16,000.00, and the consolidated surplus is $109,000.00.

As an alternative procedure, the adjustment of the parent company's Investment and Surplus accounts may be omitted, and the intercompany eliminations may be based on the subsidiary's capital stock and surplus *as of the date of acquisition*, as illustrated by the following working papers:

		Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets					
Investment in Company *S*—at cost		140,000			
Eliminate Book Value at Acquisition					
Capital Stock—90% of $100,000 00				90,000	
Surplus—90% of $50,000 00				45,000	
Goodwill					5,000G
Liabilities					
Capital Stock					
Company *P*		500,000			500,000
Company *S*			100,000		
Eliminate 90%				90,000	
Minority—10%					10,000M
Surplus:					
Company *P*		100,000			100,000S
Company *S*			60,000		
Minority—10% of Present Surplus	$60,000				6,000M
Eliminate—90% of Surplus at Acquisition	50,000			45,000	
Add to Consolidated Surplus—90% of Increase	$10,000				9,000S

The goodwill is $5,000.00 and the minority interest is $16,000.00, as before. In the first illustration, the consolidated surplus was $109,000.00, as shown by the adjusted balance of Company *P*'s Surplus account. In the second illustration, the consolidated surplus is again $109,000.00, consisting of the $100,000.00 balance in Company *P*'s surplus, plus $9,000.00 carried to the consolidated column from the surplus of the subsidiary.

Subsidiary's earnings available for parent's dividends.—From a legal viewpoint a parent company would probably be unable, in most states, to pay a dividend from subsidiary profits unless the profits have been realized by the parent company by the receipt of dividends from the subsidiary.

We must therefore recognize the conflict between the economic or business concept of parent company income and the legal concept of parent company income. To illustrate, assume that a parent company owns 100% of the subsidiary stock and that, during the first year of ownership:

(1) The subsidiary earns \$20,000.00 of profits and pays a \$6,000.00 dividend. From an economic viewpoint the parent company has earned \$20,000.00 on its investment; from a legal viewpoint it can pay only \$6,000.00 of dividends from these earnings; or,
(2) The subsidiary earns \$2,000.00 and pays a \$6,000.00 dividend (\$4,000.00 is paid from surplus created prior to acquisition). From an economic viewpoint the parent company has earned only \$2,000.00; from a legal viewpoint the parent company has increased by \$6,000.00 its surplus available for dividends; or,
(3) The subsidiary loses \$10,000.00 and pays a \$6,000.00 dividend (from surplus created prior to acquisition). From an economic viewpoint the parent company has lost \$10,000.00, but from a legal viewpoint its surplus available for dividends has increased \$6,000.00.

Because of this conflict between the economic and the legal concepts of parent company earnings from subsidiary investments, the two following methods of parent company accounting are in use:

1. *Method based on the legal viewpoint regarding earnings.*—Those who adhere to this viewpoint make entries as follows:

For subsidiary profits: No entry
For subsidiary losses: No entry
For subsidiary dividends: Debit Cash and credit an income account.

This method is subject to two criticisms: First, the investment is carried at cost although the underlying value of the investment is increased by subsidiary profits and is decreased by subsidiary losses and dividends; second, it permits such absurdities as taking up a subsidiary dividend as income

although the operations of the subsidiary have resulted in a loss [see (3) above].

2. *Method based on the economic viewpoint regarding earnings.*—Those who adhere to this viewpoint make entries as follows:

For subsidiary profits: Debit the Investment account and credit an income account.
For subsidiary losses: Credit the Investment account and debit a loss account.
For subsidiary dividends: Credit the Investment account and debit Cash.

This method has the advantage of increasing and decreasing the Investment account balance proportionately to increases and decreases in the underlying net assets of the subsidiary, and it more truly reflects the parent company's income or loss from the ownership of the subsidiary. However, it is subject to the criticism that, if the subsidiary's earnings exceed its dividends, the parent company's Surplus will be credited with amounts which it cannot legally use for dividends.

It would seem that some method should be devised which would harmonize the economic and legal viewpoints, and the author suggests the following procedure:

For subsidiary profits:
Debit Investment account.
Credit Subsidiary Undivided Profits.

For subsidiary losses:
Debit Subsidiary Undivided Profits.
Credit Investment account.

For subsidiary dividends:
Debit Cash.
Credit Investment account.

Debit Subsidiary Undivided Profits.
Credit Surplus.

Assuming that, since the date of acquisition, the subsidiary has made profits of $30,000.00, suffered losses of $5,000.00, and paid dividends of $10,000.00, the accounts would contain the entries shown on the opposite page.

	Investment Account		Subsidiary Undivided Profits		Surplus
Cost of Stock (say)	$100,000				
Surplus from Parent Company's own Operations (say)					$60,000
Subsidiary Profits	30,000			$30.000	
Subsidiary Losses		$ 5,000	$ 5,000		
Subsidiary Dividend·					
Amount Received		10,000			
Transfer to Surplus Available for Parent Company Dividends			10,000		10,000
Balances	$115,000			$15,000	$70,000

The net worth section of the balance sheet would appear as follows.

Net Worth		
Capital Stock	$500,000 00	
Surplus Available for Dividends	70,000 00	
Subsidiary Profits since Acquisition in Excess of Dividends Received	15,000 00	
Total		$585,000 00

This balance sheet presentation indicates that the parent company's surplus from an economic viewpoint is $15,000.00 greater than its surplus from a legal viewpoint.

But suppose that the subsidiary's dividends since acquisition have exceeded its profits since acquisition, as might happen if the subsidiary had a surplus at the date of acquisition. The parent company's accounts might then appear as follows.

	Debit	Credit
Subsidiary Undivided Profits:		
Profits		$ 5,000 00
Dividends	$20,000 00	
Surplus:		
From Parent's Own Operations		60,000 00
Dividends from Subsidiary		20,000 00

We now face the peculiar fact that the parent company is apparently legally able to pay a $20,000.00 dividend from surplus created by subsidiary dividends, although the subsidiary has earned only $5,000.00 since the parent company acquired its stock. In other words, it appears that the parent company's surplus from a legal viewpoint is $15,000.00 greater than its surplus from an economic viewpoint. This condition is reflected in the following net worth section of the balance sheet:

Net Worth:		
Capital Stock	$500,000 00	
Surplus Available for Dividends	80,000 00	
Subsidiary Dividends Received in Excess of Profits Earned since Acquisition	15,000 00*	
Total		$565,000 00

The net worth sections illustrated would be used only in an unconsolidated balance sheet of the parent company, in which it is important to recognize the separate corporate

entity of the parent company, which is the basis for the determination of surplus legally available for dividends. In consolidated balance sheets, the net worth sections would appear as follows:

First case:

Net Worth		
Capital Stock	$500,000 00	
Surplus	85,000 00	
Total		$585,000 00

Second case:

Net Worth		
Capital Stock	$500,000 00	
Surplus	65,000 00	
Total		$565,000.00

CHAPTER 48

PURCHASES AND SALES OF SUBSIDIARY STOCK—MAJOR AND MINOR PARENT COMPANIES

First illustration: Several purchases.—In this illustration it is assumed that the parent company (Company P) acquires its interest in the subsidiary (Company S) by several purchases of stock as follows:

December 31, 1930—600 shares, or a 60% interest.
December 31, 1931—100 shares, or a 10% interest.
December 31, 1932—200 shares, or a 20% interest.

and that all dividends were paid on December 30.

The illustration comprises the following statements and working papers:

(A) *On the assumption that the parent company takes up its share of the subsidiary's profits and dividends:*

Page 290.—A statement of the Surplus account of the subsidiary, and the Surplus and Investment accounts of the parent company.

Page 291.—Working papers for the preparation of the consolidated balance sheet.

(B) *On the assumption that the parent company carries the investment at cost:*

Page 292.—A statement of the Surplus account of the subsidiary, and the Surplus and Investment accounts of the parent company.

Page 293.—A work sheet for the determination of the adjustment to be made in the parent company's Surplus and Investment accounts to take up its percentages of the increase in subsidiary surplus.

Page 294.—Working papers for the preparation of the consolidated balance sheet.

COMPANY *P* AND SUBSIDIARY *S*
Statement of Surplus and Investment Accounts
(Subsidiary Profits and Dividends Taken Up)

	Company *S* Surplus	Company *P* — Investment in Company *S* — Per Cent	Company *P* — Investment in Company *S* — Amount	Company *P* — Surplus
December 31, 1930—Purchase, 600 Shares	$50,000 00	60%	$ 99,000.00	$100,000 00
1931 Profits Company *S*	10,000 00		6,000 00	6,000 00
Company *P*				20,000 00
Dividends: Company *S*	6,000 00*		3,600 00*	
Company *P*				12,000 00*
Purchase—December 31, 100 Shares		10	16,000 00	
Balances	$54,000 00	70%	$117,400.00	$114,000 00
1932: Profits Company *S*	10,000 00		7,000 00	7,000 00
Company *P*				20,000 00
Dividends Company *S*	6,000 00*		4,200 00*	
Company *P*				12,000 00*
Purchase—December 31, 200 Shares		20	33,000 00	
Balances	$58,000 00	90%	$153,200 00	$129,000 00
1933 Profits Company *S*	10,000 00		9,000 00	9,000 00
Company *P*				20,000 00
Dividends. Company *S*	6,000 00*		5,400 00*	
Company *P*				12,000 00*
Balances	$62,000 00	90%	$156 800 00	$146,000 00
1934: Profits Company *S*	10,000 00		9,000 00	9,000 00
Company *P*				20,000 00
Dividends. Company *S*.	6,000 00*		5,400 00*	
Company *P*.				12,000 00*
Balances	$66,000 00	90%	$160,400 00	$163,000 00

* *Deductions*

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet Working Papers

December 31, 1934

(Subsidiary Profits and Dividends Taken Up)

	Company P	Company S	Eliminations	Consolidated Balance Sheet
Assets				
Cash	40,000 00	30,000 00		70,000 00
Accounts Receivable	70,000 00	65,000 00		135,000 00
Inventory	102,600 00	86,000 00		188,600 00
Investment in Company S—90%	160,400 00			
Eliminate				
Capital Stock			90,000 00	
Surplus			59,400 00	
Goodwill				11,000 00G
	373 000 00	181,000 00	149,400 00	404,600 00
Liabilities				
Accounts Payable	10,000 00	15,000 00		25,000 00
Capital Stock				
Company P	200,000 00			200,000 00
Company S		100,000 00	90,000 00	10,000 00M
Surplus				
Company P	163,000 00			163,000 00
Company S		66 000 00	59,400 00	6,600 00M
	373,000 00	181 000 00	149,400 00	404,600 00

COMPANY *P* AND SUBSIDIARY *S*

Statement of Surplus and Investment Accounts

(Investment Carried at Cost)

	Company *S*	Company *P*		
		Investment in Company *S*		
	Surplus	Per Cent	Cost	Surplus
December 31, 1930—Purchase, 600 Shares	$50,000 00	60%	$ 99,000 00	$100,000 00
1931 Profits	10,000 00			20,000 00
Dividends Company *S*	6,000 00*			3,600.00
Company *P*				12,000 00*
Purchase—December 31, 100 Shares		10	16,000 00	
Balances	$54,000 00	70%	$115,000 00	$111,600 00
1932 Profits	10,000 00			20,000 00
Dividends Company *S*	6,000 00*			4,200 00
Company *P*				12,000 00*
Purchase—December 31, 200 Shares		20	33,000 00	
Balances	$58,000 00	90%	$148,000 00	$123,800 00
1933 Profits	10,000 00			20,000 00
Dividends Company *S*	6,000 00*			5,400 00
Company *P*				12,000 00*
Balances	$62,000 00	90%	$148,000 00	$137,200 00
1934 Profits	10,000 00			20,000 00
Dividends. Company *S*	6,000 00*			5,400 00
Company *P*				12,000 00*
Balances	$66,000 00	90%	$148,000 00	$150,600 00

* Deduction.

Work Sheet to Determine Adjustment of Parent Company's Surplus and Investment Accounts
(Investment Carried at Cost)

	Company S	Company P	
		Investment in Company S	
Acquisition Dates	Surplus	Per Cent	Amount
December 31, 1930—P buys 60% of S	$50,000 00		
1931—Increase	4,000 00	60%	$ 2,400 00
December 31, 1931—P buys 10% of S	$54,000 00		
1932—Increase	4,000 00	70%	2 800 00
December 31, 1932—P buys 20% of S	$58,000 00		
1933–1934—Increase	8,000 00	90%	7,200 00
Balance—December 31, 1934	$66,000 00		
Adjustment			$12,400 00

Note that this work sheet shows the surplus of the subsidiary on each stock acquisition date, the increases in the subsidiary surplus in the intervals, and the parent company's percentages of such increases.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934
(Investment Carried at Cost)

	Company P	Company S	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Cash	40,000 00	30,000 00				70,000 00
Accounts Receivable	70,000 00	65,000 00				135,000 00
Inventory	102,600.00	86,000 00				188,600 00
Investment in Company *S*—90%—Cost	148,000 00					
Adjustment			12,400 00			
Eliminate.						
Capital Stock					90,000 00	
Surplus.					59,400 00	
Goodwill						11,000 00G
	360,600 00	181,000 00			149,400 00	404,600 00
Liabilities						
Accounts Payable	10,000 00	15,000 00				25,000 00
Capital Stock:						
Company *A*	200,000 00					200,000 00
Company *B*		100,000 00			90,000 00	10,000 00M
Surplus:						
Company *A*	150,600 00			12,400 00		163,000 00
Company *B*		66 000 00			59,400 00	6,600 00M
	360,600 00	181,000 00	12,400 00	12,400 00	149,400 00	404,600 00

Note that these working papers include the adjustment determined in the work sheet on page 293.

Second illustration: Purchases and sales.—In this illustration, Company P made several purchases of the stock of Company S, and also made two sales of the stock, the facts with respect to these purchases and sales are shown in the statements. The illustration comprises the following statements, working papers, and comments:

(A) *On the assumption that the parent company takes up its share of the subsidiary's profits and dividends.*

Page 296.—Statement of the Surplus account of the subsidiary, and the Surplus and Investment accounts of the parent company.

Page 295.—Comments and explanations applicable to the sales and purchases shown in the statement on page 296.

Page 298.—Working papers for the preparation of the consolidated balance sheet.

Page 298.—Proof of the goodwill determined in the working papers on the same page.

(B) *On the assumption that the parent company carries the investment at cost:*

Page 300 —Statement of the Surplus account of the subsidiary, and the Surplus and Investment accounts of the parent company.

Page 301.—Work sheet to determine the adjustment of the parent company's Surplus and Investment accounts.

Page 302 —Comment on the effect of stock sales on the adjustment.

Page 303.—Working papers for the preparation of the consolidated balance sheet.

Comments on entries for sales. (*See statement, page* 296).—All sales are regarded as having been made from the first stock purchased, and the Investment account is relieved of the carrying value of the stock sold—that is, the cost plus the net increase resulting from taking up profits and dividends As the first purchase consisted of 600 shares, and as each sale disposed of 50 shares, each sale represented $\frac{5}{60}$ of the

COMPANY *P* AND SUBSIDIARY *S*

Statement of Surplus and Investment Accounts

(Subsidiary Profits and Dividends Taken Up)

	Company *S* Surplus	Company *P*: Investment In Company *S*: Per Cent	Company *P*: Investment In Company *S*: Amount	Company *P*: Surplus
December 31, 1930—Purchase, 600 Shares	$50,000 00	60%	$ 99,000 00	$100,000 00
1931 Profits. Company *S*	10,000 00		6,000 00	6,000 00
Company *P*				20,000 00
Dividends Company *S*	6,000 00*		3,600 00*	
Company *P*				12,000 00*
Purchase—December 31—100 Shares		10	16,000 00	
Balances	$54,000 00	70%	$117,400 00	$114,000 00
1932 Profits Company *S*	10,000 00		7,000 00	7,000 00
Company *P*				20,000.00
Dividends Company *S*	6,000 00*		4,200 00*	
Company *P*				12,000 00*
Purchase—December 31—200 Shares		20	33,000 00	
Balances	$58,000 00	90%	$153,200 00	$129,000 00
1933: Sale—January 1—50 Shares (see comments)		5 *	8,650 00*	1.350 00
Profits: Company *S*	10,000 00		8,500 00	8,500 00
Company *P*				20,000 00
Dividends Company *S*	6,000 00*		5,100 00*	
Company *P*				12,000 00*
Balances	$62,000 00	85%	$147,950 00	$146,850 00
1934 Sale—June 30—50 Shares (see comments)		5 *	8,850 00*	1,150 00
Purchase—September 30—100 Shares (see comments)		10	19,000 00	
Profits. Company *S*	10,000 00			
80% for Year			8,000 00	8,000 00
10% for ¼ Year			250 00	250 00
Company *P*				20,000 00
Dividends: Company *S*	6,000.00*		5,400 00*	
Company *P*				12,000 00*
Balances	$66,000 00	90%	$160,950 00	$164,250 00

*Deductions

first stock purchased. The amounts credited to the Investment account and the profits on the sales are determined as follows.

First sale—January 1, 1933:

Sale price			$10,000
Less carrying value			
Cost—5/60 of $99,000 00		$8,250	
Increase since purchase:			
1931—Profits less dividends on 600 shares owned	$2,400		
5/60 thereof		200	
1932—Profits less dividends on 700 shares owned	2,800		
5/70 thereof		200	
Total carrying value (credited to Investment)			8,650
Profit (credited to Surplus)			$ 1,350

Second sale—June 30, 1934:

Sale price			$10,000
Less carrying value			
Cost—5/60 of $99,000.00		$8,250	
Increase—1931 (computed as above)		200	
Increase—1932 (computed as above)		200	
Increase—1933—Profits less dividends on 850 shares owned	$3,400		
5/85 thereof		200	
Total carrying value (credited to Investment)			8,850
Profit (credited to Surplus)			$ 1,150

In connection with the second sale, it will be noted that the subsidiary's profit to June 30, 1934, the date of the sale, has not been taken up by the parent company. If it were known that the profit of Company S for the first six months of 1934 was (for example) $5,000.00 (half of the profit for the year), the entries to be made by Company P at the time of the sale could be:

	Investment in Company S	Surplus
To take up 5% of profit of Company S for the first 6 months of 1934	$ 250 00	$250 00
Sale of 50 shares	9,100 00*	900 00

* Deduction

The net effect of the two methods is the same. In the second method, the Investment account is debited with $250.00 and credited with $9,100.00, making a net credit of

\$8,850.00, as in the first method. In the second method, the \$1,150.00 credit to Surplus consists of two parts: the \$250.00 share of income applicable to the stock to June 30, 1934, and \$900.00 profit on the sale.

Comment on stock purchase during year.—One hundred shares of stock (10% interest) were purchased on September 30, 1934. The Investment account was charged with the cost. It will be noted that the subsidiary profits for 1934 are taken up as follows:

Applicable to 800 shares owned during the entire year 80% of \$10,000 00	\$8,000 00
Applicable to 100 shares owned during the last quarter of the year. ¼ of 10% of \$10,000 00	250 00

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Balance Sheet Working Papers
December 31, 1934
(Subsidiary Profits and Dividends Taken Up)

	Company *P*	Company *S*	Eliminations	Consolidated Balance Sheet
Assets				
Cash	40,700	30,000		70,700
Accounts Receivable	70,000	65,000		135,000
Inventory	102,600	86,000		188,600
Investment in Company *S*—90%	160,950			
Eliminate				
Capital Stock—90%			90,000	
Surplus			59,400	
Goodwill				11,550
	374,250	181,000	149,400	405,850
Liabilities				
Accounts Payable	10,000	15,000		25,000
Capital Stock:				
Company *P*	200,000			200,000
Company *S*		100,000	90,000	10,000M
Surplus				
Company *P*	164,250			164,250
Company *S*		66,000	59,400	6,600M
	374,250	181,000	149,400	405,850

Proof of goodwill shown in consolidated working papers.—The goodwill shown in the consolidated working papers consists of the goodwill payments made in connection with the various stock purchases, minus the goodwill payments

applicable to the stock sold. On the first-in first-out theory, the stock sold is taken from the first stock purchased; the goodwill payment on the first purchase was $15.00 per share, as shown below; therefore the goodwill payment applicable to the stock sold is regarded as $15.00 per share.

As illustrated in the statement of the parent company's accounts on page 296, the parent company took up (as applicable to the stock purchased on September 30, 1934) only the portion of the profit applicable to the three months subsequent to purchase Therefore the profits for the first nine months are included in the book value of the stock on September 30, in determining the goodwill applicable to the stock purchase on that date.

Purchase—December 31, 1930			
Cost of 600 Shares—60 %		$99,000	
Book value			
Stock and Surplus of Company *S* (page 296)	$150,000		
60 % thereof		90,000	
Goodwill ($15 00 per share)			$ 9,000
Purchase—December 31, 1931			
Cost of 100 Shares—10 %		$16,000	
Book value			
Stock and Surplus of Company *S* (page 296).	$154,000		
10 % thereof . . .		15,400	
Goodwill ($6 00 per share)			600
Purchase—December 31, 1932			
Cost of 200 Shares—20 % .		$33,000	
Book value			
Stock and Surplus of Company *S* (page 296)	$158,000		
20 % thereof		31,600	
Goodwill ($7 00 per share)			1,400
Sale—January 1, 1933—50 Shares—Regarded (on first-in first-out theory) as purchased December 31, 1930, hence the goodwill was $15 00 per share $15 00 × 50			750*
Sale—June 30, 1934—$15 00 × 50			750*
Purchase—September 30, 1934			
Cost of 100 Shares		$19,000	
Book value			
Stock and Surplus of Company *S*—December 31, 1933 (page 296)	$162,000		
Add profits to Sept 30, 1934—¾ of $10,000	7,500		
Total	$169,500		
10 % thereof . ,		16,950	
Goodwill—$20.50 per share			2,050
Total Goodwill			$11,550

* Deductions

COMPANY *P* AND SUBSIDIARY *S*

Statement of Surplus and Investment Accounts

(Investment Carried at Cost)

	Company *S* Surplus	Company *P* — Investment In Company *S* — Per Cent	Company *P* — Investment In Company *S* — Cost	Company *P* — Surplus
December 31, 1930—Purchase, 600 Shares	$50,000 00	60%	$ 99,000 00	$100,000 00
1931 Profits	10,000 00			20,000 00
Dividends: Company *S*.	6,000 00*			3,600 00
Company *P*				12,000 00*
Purchase—December 31—100 Shares		10	16,000 00	
Balances	$54,000 00	70%	$115,000.00	$111,600 00
1932 Profits	10,000 00			20,000 00
Dividends Company *S*	6,000 00*			4,200 00
Company *P*				12,000.00*
Purchase—December 31—200 Shares		20	33,000.00	
Balances	$58,000 00	90%	$148,000 00	$123,800 00
1933. Sale—January 1—50 Shares (see note)		5 *	8,250 00*	1,750 00
Profits	10,000 00			20,000 00
Dividends Company *S*	6,000 00*			5,100 00
Company *P*				12,000 00*
Balances	$62,000 00	85%	$139,750 00	$138,650 00
1934: Sale—June 30—50 Shares (see note)		5 *	8,250 00*	1 750 00
Purchase—September 30—100 Shares		10	19,000 00	
Profits	10,000 00			20,000 00
Dividends: Company *S*	6,000 00*			5,400 00
Company *P*				12,000 00*
Balances	$66,000 00	90%	$150,500 00	$153,800 00

* Deduction

Note—Since the investment is carried at cost, only the cost of the stock sold is credited to the Investment account. The stock sold is regarded as a part of the first stock purchased. The profits on the sales are computed as follows

Sale price	$10,000 00
Cost—5/60 of $99,000 00	8,250 00
Profit	$ 1,750 00

Work Sheet to Determine Adjustment of Parent Company's Surplus and Investment Accounts

(Investment Carried at Cost)

Acquisition Dates	Company *S* Surplus	Company *P*: Investment In Company *S*: Per Cent	Company *P*: Investment In Company *S*: Amount
December 31, 1930—*P* buys 600 Shares, of which 500 are retained	$50,000 00		
Increase—1931	4,000 00	50 %	$ 2,000 00
December 31, 1931—*P* buys 100 Shares	$54,000 00		
Increase—1932	4,000 00	60	2,400 00
December 31, 1932—*P* buys 200 Shares	$58,000 00		
Increase—1933	4,000 00	80	3,200 00
Increase to September 30, 1934—¾ of year's profit	7,500 00	80	6,000 00
September 30, 1934—*P* buys 100 Shares	$69,500 00		
Decrease to December 31, 1934—¼ of year's profit minus dividend	3,500 00*	90	3,150 00*
Balance—December 31, 1934	$66,000 00		
Adjustment			$10,450 00

* Deduction.

Effect of sales on computation of adjustment.—It will be noted that, in the work sheet on page 301, the adjustment for each year is based, not on the percentage of stock owned during the year, but on the percentage of stock owned and *retained to the end of the period.* For instance, the parent company owned 60% of the subsidiary stock during 1931, but it subsequently sold 10%; therefore the 1931 adjustment is for only 50% of the increase in the subsidiary's surplus during that year. The operating income applicable to the 10% sold should be ignored, because, since the investment was carried at cost, the amounts taken into the parent company's Surplus as profits on sales of stock really include the parent company's share of the subsidiary's earnings (minus dividends received) applicable to the stock sold. This can be proved by comparing the entries for profit on stock sales under the two methods of acounting.

	Investment Carried at Cost (See page 300)	Subsidiary Profits Taken Up (See page 296)
Profit on first sale	$1,750 00	$1,350 00
Profit on second sale	1,750 00	1,150 00
Total	$3,500 00	$2,500 00

The excess $1,000 00 recorded as profit on sales (if the investment is carried at cost) is really the excess of subsidiary profits over dividends (on the 100 shares sold) during the period that the shares were owned by the parent company, as shown below (the annual profits were $10.00 per share and the dividends were $6.00 per share, leaving a net increase in surplus of $4.00 per share):

1931—100 shares	$ 400 00
1932—100 shares	400 00
1933— 50 shares	200 00
Total	$1,000 00

Consolidated balance sheet working papers.—In the following working papers the adjustment of the parent company's Surplus and Investment accounts as determined on page 301 is applied, and eliminations are then made as in the working papers on page 298.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Balance Sheet Working Papers

December 31, 1934

(Investment Carried at Cost)

	Company P	Company S	Adjustments Debit	Adjustments Credit	Eliminations	Consolidated Balance Sheet
Assets						
Cash	40,700 00	30,000 00				70,700 00
Accounts Receivable	70,000 00	65,000 00				135,000 00
Inventory	102,600 00	86,000 00				188,600 00
Investment in Company *S*—90%—Cost	150,500 00					
Adjustment			10,450 00			
Eliminate.						
Capital Stock—90%					90,000 00	
Surplus—90%					59 400 00	
Goodwill.						11,550 00
	363,800 00	181,000 00			149,400 00	405,850 00
Liabilities						
Accounts Payable	10 000 00	15 000 00				25,000 00
Capital Stock:						
Company *P*	200,000 00					200 000 00
Company *S*		100,000 00			90,000 00	10,000 00M
Surplus:						
Company *P*	153,800 00			10,450 00		164,250 00
Company *S*		66,000 00			59,400 00	6,600 00M
	363,800 00	181,000 00	10.450 00	10,450 00	149 400 00	405,850 00

Third illustration: Control through a minor parent company.—In this illustration, Company A acquires an 80% interest in Company B. Since Company B owns a 90% interest in Company C, Company A enjoys a control of Company C through the minor parent company, B. The illustration comprises the following statements and working papers:

(A) *On the assumption that the parent companies record their shares of subsidiary profits, losses, and dividends through the Investment accounts:*

Page 306.—A statement of the Surplus accounts of all companies, and of the Investment accounts on the books of the minor parent company, B, and the major parent company, A.

In this statement, note that, after Company B has taken up its 90% of the profit of Company C, Company A takes up 80% of the amount taken up by Company B. For instance, in 1932, Company C made a profit of \$6,000 00; Company B took up 90% thereof, or \$5,400.00; Company A then took up 80% of \$5,400.00, or \$4,320.00. In this manner the major parent company, A, took up its share of the total profit of B, including the profit from B's own operations, and the profit which B was entitled to take up because of its status as a parent company owning a controlling interest in the stock of C.

Page 307.—Consolidated balance sheet working papers.

Note that the eliminations from the Investment account on the books of the minor parent company, B, are based on the surplus of the subsidiary, C, at the balance sheet date; in other words, no new difficulty with respect to

eliminations is here introduced.

Note also the Minority column used to assemble the details with respect to the minority interests

(B) *On the assumption that the investments are carried at cost*:

Page 308.—A statement of the Surplus accounts of all companies, and of the Investment accounts on the books of the minor and major parent companies.

In this statement, note that each parent company takes up the dividends received from its own subsidiary, but that Company *A* does not make any entries with respect to the dividends received by Company *B* from Company *C*.

Page 309.—Work sheet to determine adjustments to be made in the Surplus and Investment accounts of the major and minor parent companies, *A* and *B*.

Note that Company *B*'s Surplus and Investment accounts are adjusted for its 90% of the increase (during 1930 and 1931) and of the decrease (during 1932 and 1933) in the surplus of Company *C*. The Surplus and Investment accounts on the books of Company *A* are adjusted for its 80% of the decrease in Company *B*'s surplus per books, and also for 80% of Company *B*'s adjustments.

Page 310.—Consolidated balance sheet working papers.

Note that these working papers contain the adjustments determined in the work sheet on page 309, and that, after these adjustments are applied, the same eliminations can be made as those in the consolidated working papers on page 307.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Statement of Surplus and Investment Accounts
(Subsidiary Profits, Losses, and Dividends Taken Up)

	Company C	Company B			Company A		
		Investment In Company C			Investment In Company B		
	Surplus	Per Cent	Amount	Surplus	Per Cent	Amount	Surplus
1929 Purchase—December 31	$50,000	90%	$140,000	$100,000			
1930: Profits: Company *C*	20,000		18,000	18,000			
Company *B*				20,000			
Dividends. Company *C*	8,000*		7,200*				
Company *B*				10 000*			
Balances	$62,000	90%	$150,800	$128,000			
1931: Profits. Company *C*	18,000		16 200	16,200			
Company *B*				15,000			
Dividends Company *C*	8,000*		7,200*				
Company *B*				10,000*			
Purchase—December 31					80%	$284,360	$150,000
Balances	$72,000	90%	$159,800	$149 200	80%	$284,360	$150,000
1932 Profits Company *C* (see comment, page 304)	6,000		5,400	5,400		4,320	4,320
Company *B*				3,000		2,400	2,400
Company *A*							30,000
Dividends Company *C*	8,000*		7,200*				
Company *B*				10,000*		8,000*	
Company *A*							25,000*
Balances	$70,000	90%	$158,000	$147,600	80%	$283,080	$161,720
1933 Profits (Losses*) Company *C*	5,000*		4,500*	4,500*		3,600*	3,600*
Company *B*				6,000*		4,800*	4,800*
Company *A*							6,000
Dividends: Company *C*	8,000*		7,200*				
Company *B*				10,000*		8,000*	
Company *A*							25,000*
Balances	$57,000	90%	$146,300	$127,100	80%	$266,680	$134,320

* Deduction

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Consolidated Balance Sheet Working Papers

December 31, 1933

(Subsidiary Profits, Losses, and Dividends Taken Up)

	Company A	Company B	Company C	Elimina-tions	Mi-nority	Consoli-dated
Assets						
Cash	17,640 00	40,800 00	37,000 00			95,440 00
Accounts Receivable	50,000 00	80,000 00	80,000.00			210,000 00
Inventories	60,000 00	70,000 00	50,000 00			180,000 00
Investment in Company *B*—80%	266,680 00					
Eliminate						
Capital Stock				160,000 00		
Surplus				101,680 00		
Goodwill						5,000 00G
Investment in Company *C*—90%		146,300 00				
Eliminate						
Capital Stock				90,000 00		
Surplus				51,300 00		
Goodwill						5,000 00G
	394,320 00	337,100 00	167 000 00	402,980 00		495 440 00
Liabilities						
Accounts Payable	10,000 00	10 000 00	10,000 00			30,000 00
Capital Stock						
Company *A*	250,000 00					250,000 00
Company *B*		200 000 00		160,000 00	40,000 00	
Company *C*			100,000 00	90 000 00	10 000 00	
Surplus:						
Company *A*	134 320 00					134,320 00
Company *B*		127,100 00		101,680 00	25 420 00	
Company *C*			57,000 00	51,300 00	5,700 00	
Total Minority Interest					81 120 00	81,120 00
	394,320 00	337,100 00	167,000 00	402 980 00		495,440 00

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Statement of Surplus and Investment Accounts

(Investments Carried at Cost)

	Company *C*	Company *B*			Company *A*		
		Investment In Company *C*			Investment In Company *B*		
	Company *C* Surplus	Per Cent	Amount	Surplus	Per Cent	Amount	Surplus
1929 Purchase—December 31	$50,000 00	90%	$140,000 00	$100,000 00			
1930: Profits	20,000 00			20,000 00			
Dividends Company *C*	8,000 00*			7,200 00			
Company *B*				10,000 00*			
Balances	$62,000 00	90%	$140,000 00	$117,200 00			
1931 Profits	18,000 00			15,000 00			
Dividends. Company *C*	8,000.00*			7,200 00			
Company *B*				10,000 00*			
Purchase—December 31					80%	$284,360 00	$150,000 00
Balances	$72,000 00	90%	$140,000 00	$129,400 00	80%	$284,360 00	$150,000 00
1932. Profits	6,000 00			3,000 00			30,000 00
Dividends· Company *C*	8,000 00*			7,200 00			
Company *B*				10,000 00*			8,000 00
Company *A*							25,000 00*
Balances	$70,000 00	90%	$140,000 00	$129,600 00	80%	$284,360 00	$163,000 00
1933 Profits (Losses*)	5,000 00*			6,000 00*			6,000 00
Dividends· Company *C*	8,000 00*			7,200 00			
Company *B*				10,000 00*			8,000 00
Company *A*							25,000 00*
Balances	$57,000 00	90%	$140,000 00	$120,800 00	80%	$284,360 00	$152,000 00

* Deduction

Work Sheet to Determine Adjustments of
Parent Companies' Surplus and Investment Accounts
(Investments Carried at Cost)

Acquisition Dates	Subsidiaries' Surplus Accounts—Per Books: Company C	Subsidiaries' Surplus Accounts—Per Books: Company B	Company B Investment In Company C: Per Cent	Company B Investment In Company C: Amount	Company A Investment In Company B: Per Cent	Company A Investment In Company B: Amount
December 31, 1929—B buys 90% of C	\$50,000 00					
1930–1931 Increase	22,000 00		90%	\$19,800 00		
December 31, 1931—A buys 80% of B	\$72,000 00	\$129,400 00				
1932–1933 Decrease						
Company C	15,000 00*		90	13,500 00*	80%	\$10,800 00*
Company B		8,600 00*			80	6,880.00*
Balances—December 31, 1933	\$57,000 00	\$120,800 00				
Total Adjustments Company B		6,300 00		\$ 6,300 00		
Company A						\$17,680 00*
Adjusted Balances	\$57,000 00	\$127,100 00				
Eliminations:						
Company B—90%	\$51,300 00					
Company A—80%		\$101,680 00				
Minority Interests	5,700 00	25,420 00				
Totals	\$57,000 00	\$127,100 00				

* Deduction

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Consolidated Balance Sheet Working Papers

December 31, 1933

(Investments Carried at Cost)

	Company *A*	Company *B*	Company *C*	Adjustments Debit	Adjustments Credit	Eliminations	Minority	Consolidated
Assets								
Cash	17,640	40,800	37,000					95,440
Accounts Receivable	50,000	80,000	80,000					210,000
Inventories	60,000	70,000	50,000					180,000
Investment in Company *B*—80%—Cost	284,360							
Adjustment					17,680(A)			
Eliminate:								
Capital Stock						160,000		
Surplus						101,680		
Goodwill								5,000G
Investment in Company *C*—90%—Cost		140,000						
Adjustment				6,300(B)				
Eliminate								
Capital Stock						90,000		
Surplus						51,300		
Goodwill								5,000G
	412,000	330,800	167,000			402,980		495,440
Liabilities								
Accounts Payable	10,000	10,000	10,000					30,000
Capital Stock								
Company *A*	250,000							250,000
Company *B*		200,000				160,000	40,000	
Company *C*			100,000			90,000	10,000	
Surplus.								
Company *A*	152,000			17,680(A)				134,320
Company *B*		120,800			6,300(B)	101,680	25,420	
Company *C*			57,000			51,300	5,700	
Total Minority Interest							81,120	81,120
	412,000	330,800	167 000	23,980	23,980	402,980		495 440

Fourth illustration: Control through minor parent company and direct.—In this illustration Company *A* buys 60%, and later an additional 20%, of the stock of Company *B*. Company *B* buys 70%, and later an additional 5%, of the stock of Company *C*. Company *A* buys 20%, and later an additional 5%, of the stock of Company *C*. The stockholdings are summarized as follows:

During 1929 and 1930, *A* owns 60% of *B*.
During 1931, *A* owns 60% of *B*; *B* owns 70% of *C*.
During 1932, *A* owns 60% of *B* and 20% of *C*; *B* owns 70% of *C*.
During 1933, *A* owns 80% of *B* and 20% of *C*, *B* owns 70% of *C*.
During 1934, *A* owns 80% of *B* and 25% of *C*; *B* owns 75% of *C*.

Company *A*'s control of Company *C* is therefore based largely upon its ownership of the stock of the minor parent company, *B*, but partly upon direct ownership of the stock of Company *C*. The illustration comprises the following statements and working papers:

(A) *On the assumption that the parent companies take up their percentages of the profits, losses, and dividends of the subsidiaries*:

Pages 312 and 313.—A statement of the Surplus and Investment accounts of the three companies.

Note that, in 1931, Company *B* takes up 70% of the profit of Company *C*, or \$4,200.00; Company *A* thereupon takes up 60% of this \$4,200.00 by a debit to Investment in Company *B* and a credit to Surplus.

In 1932, Company *A* takes up (by a debit to Investment in Company *B*) 60% of the \$1,400.00 taken up by Company *B*. But, since Company *A* now owns 20% of the stock of Company *C*, it also takes up 20% of Company *C*'s \$2,000 00 profit, or \$400.00, by a debit to Investment in Company *C*. (Since the 20% interest is a minor-

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Statement of Surplus and Investment Accounts

(Subsidiary Profits, Losses, and Dividends Taken Up)

	Company *C* Surplus	Company *B*: Investment In Company *C* Per Cent	Company *B*: Investment In Company *C* Amount	Company *B*: Surplus	Company *A*: Investment In Company *C* Per Cent	Company *A*: Investment In Company *C* Amount	Company *A*: Investment In Company *B* Per Cent	Company *A*: Investment In Company *B* Amount	Company *A*: Surplus
1928 Purchase—December 31				$50 000			60 %	$100,000	$150,000
1929 Profits Company *B*				15,000				9,000	9,000
Company *A*									25,000
Dividends Company *B*				6,000*				3,600*	
Company *A*									9,000*
Balances				$59,000			60 %	$105,400	$175,000
1930 Profits Company *B*				12,000				7,200	7,200
Company *A*									20,000
Dividends Company *B*				6,000*				3,600*	
Company *A*									9,000*
Purchase—December 31	$30,000	70 %	$60,000						
Balances	$30,000	70 %	$60,000	$65,000			60 %	$109,000	$193,200
1931 Profits Company *C* (see comment, page 311)	6,000		4,200	4,200				2,520	2,520
Company *B*				10,000				6,000	6,000
Company *A*									15,000
Dividends Company *C*	3,000*		2,100*						
Company *B*				6,000*				3,600*	
Company *A*									9,000*
Purchase—December 31					20 %	$18,000			
Balances	$33,000	70 %	$62,100	$73,200	20 %	$18,000	60 %	$113,920	$207,720
1932 Profits Company *C* (see comment, page 311)	2,000		1,400	1,400		400		840	1,240
Company *B*				5,000				3,000	3,000
Company *A*									10,000
Dividends Company *C*	3,000*		2,100*			600*			
Company *B*				6,000*				3,600*	
Company *A*									9,000*
Purchase—December 31							20 %	36,000	
Balances	$32,000	70 %	$61,400	$73,600	20 %	$17,800	80 %	$150,160	$212,960
1933 Profits (Losses*) Company *C*	3,000*		2,100*	2,100*		600*		1,680*	2,280*
Company *B*				2,000*				1,600*	1,600*
Company *A*									5,000
Dividends Company *C*	3,000*		2,100*			600*			
Company *B*				6,000*				4,800*	
Company *A*									9,000*
Purchase—December 31		5	4,000		5	4,000			
Balances	$26,000	75 %	$61,200	$63,500	25 %	$20,600	80 %	$142,080	$205,080
1934 Losses Company *C*	2,000*		1,500*	1,500*		500*		1,200*	1,700*
Company *B*				4,000*				3,200*	3,200*
Company *A*									3,000*
Dividends Company *C*	3,000*		2,250*			750*			
Company *B*				6,000*				4,800*	
Company *A*									9,000*
Balances	$21,000	75 %	$57,450	$52,000	25 %	$19,350	80 %	$132,880	$188,180

* Deductions

ity holding, the entry would not be justified except for the fact that Company *A* exercises control of Company *C* through the minor parent company, *B*.) Company *A* credits its Surplus account with $1,240.00, to offset the debits to the two Investment accounts.

Adjustments with respect to the profits and losses of Company *C* in subsequent years are made in a similar manner

Page 315.—Consolidated balance sheet working papers.

(B) *On the assumption that the parent companies carry the investments at cost:*

Page 316.—A statement of the Surplus and Investment accounts of the three companies

Each company takes up the subsidiary dividends as income. Company *A* makes no entry for the dividends received by Company *B* from Company *C*.

Page 317.—Work sheet to determine adjustments of Surplus and Investment accounts of major and minor parent companies.

Note that Company *B* adjusts its accounts for its percentage of the change in the surplus of Company *C*. Company *A* adjusts its Investment in *C* for its 20% (later 25%) interest in the change in the surplus of Company *C*, it adjusts its Investment in *B* for its percentage of the change in *B*'s surplus and its percentage of *B*'s adjustments.

Page 318.—Consolidated balance sheet working papers.

Note the application of the adjustments determined in the work sheet on page 317. The eliminations are the same as those in the working papers on page 315.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Consolidated Balance Sheet Working Papers

December 31, 1934

(Subsidiary Profits, Losses, and Dividends Taken Up)

	Company A	Company B	Company C	Eliminations	Minority	Consolidated
Assets						
Cash	60,000 00	20,150 00	15,000 00			95,150 00
Accounts Receivable	90,000 00	50,000 00	40,000 00			180,000 00
Inventories	60,950 00	49,400 00	41,000 00			151,350 00
Investment in Company *B*—80%	132,880 00					
Eliminate						
Capital Stock				80,000 00(a)		
Surplus				41,600 00(c)		
Goodwill						11,280 00G
Investment in Company *C*—25%	19,350 00					
Eliminate.						
Capital Stock				12,500 00(b)		
Surplus				5,250 00(d)		
Goodwill						1,600 00G
Investment in Company *C*—75%		57,450 00				
Eliminate.						
Capital Stock				37,500 00(b)		
Surplus				15,750 00(d)		
Goodwill						4 200 00G
	363,180 00	177 000 00	96,000 00	192,600 00		443,580 00
Liabilities						
Accounts Payable	25,000 00	25,000 00	25,000 00			75,000 00
Capital Stock						
Company *A*	150,000 00					150,000 00
Company *B*		100,000 00		80,000 00(a)	20,000 00	
Company *C*			50,000 00	50,000 00(b)		
Surplus						
Company *A*	188,180 00					188,180 00
Company *B*		52,000 00		41,600 00(c)	10,400 00	
Company *C*			21,000 00	21,000 00(d)		
Minority Interest					30,400 00	30 400 00
	363,180 00	177,000 00	96,000 00	192,600 00		443 580 00

COMPANIES A, B, AND C

Statement of Surplus and Investment Accounts

(Investments Carried at Cost)

		Company C	Company B			Company A				
			Investment In Company C			Investment In Company C		Investment In Company B		
		Surplus	Per Cent	Cost	Surplus	Per Cent	Cost	Per Cent	Cost	Surplus
1928	Purchase—December 31							60 %	$100,000 00	
1929	Profits				$50,000 00					$150,000 00
					15,000 00					25,000 00
	Dividends Company B				6,000 00*					3,600 00
	Company A									9,000 00*
	Balances				$59,000 00			60 %	$100,000 00	$169,600.00
1930	Profits				12,000 00					20,000 00
	Dividends Company B				6,000 00*					3,600 00
	Company A									9,000 00*
	Purchase—December 31	$30,000 00	70 %	$60,000 00						
	Balances	$30,000 00	70 %	$60,000 00	$65,000.00			60 %	$100,000 00	$184,200 00
1931	Profits	6,000 00			10,000 00					15,000 00
	Dividends Company C	3,000 00*			2,100 00					
	Company B				6,000 00*					3,600 00
	Company A									9,000 00*
	Purchase—December 31					20 %	$18,000 00			
	Balances	$33,000 00	70 %	$60,000 00	$71,100 00	20 %	$18,000 00	60 %	$100,000 00	$193,800 00
1932	Profits	2,000 00			5,000 00					10,000 00
	Dividends Company C	3,000 00*			2,100 00					600 00
	Company B				6,000 00*					3,600 00
	Company A									9,000 00*
	Purchase—December 31							20 %	36,000 00	
	Balances	$32,000 00	70 %	$60,000 00	$72,200 00	20 %	$18,000 00	80 %	$136,000 00	$199 000 00
1933	Profits (Losses*)	3,000 00*			2,000 00*					5,000 00
	Dividends Company C	3,000 00*			2,100 00					600 00
	Company B				6,000 00*					4,800 00
	Company A									9,000 00*
	Purchase—December 31		5	4,000 00		5	4,000 00			
	Balances	$26,000 00	75 %	$64,000 00	$66,300 00	25 %	$22,000 00	80 %	$136,000 00	$200,400 00
1934	Profits (Losses*)	2,000 00*			4,000 00*					3,000 00*
	Dividends Company C	3,000 00*			2,250 00					750 00
	Company B				6,000 00*					4,800 00
	Company A									9,000 00*
	Balances	$21,000 00	75 %	$64,000 00	$58 550 00	25 %	$22,000 00	80 %	$136,000 00	$193,950 00

* Deductions

Work Sheet to Determine Adjustments
of Parent Companies' Surplus and Investment Accounts
(Investments Carried at Cost)

	Subsidiaries' Surplus Accounts—Per Books		Company B: Investment In Company C		Company A: Investment In Company C		Company A: Investment In Company B	
Acquisition Dates	Company C	Company B	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount
Dec. 31, 1928—A buys 60% of B		$50,000						
1929–1930—Increase		15,000					60%	$9,000
Dec 31, 1930—B buys 70% of C	$30,000	$65,000						
1931. Increase—Co C	3,000		70%	$2,100			60	1,260
Increase—Co B		6,100					60	3,660
Dec 31, 1931—A buys 20% of C	$33,000	$71,100						
1932 Decrease—Co. C	1,000*		70	700*	20%	$ 200*	60	420*
Increase—Co B		1,100					60	660
Dec 31, 1932—A buys 20% of B	$32,000	$72,200						
1933. Decrease—Co. C	6,000*		70	4,200*	20	1,200*	80	3,360*
Decrease—Co B		5,900*					80	4,720*
Dec 31, 1933—A and B each buy 5% of C	$26,000	$66,300						
1934 Decrease—Co C	5,000*		75	3,750*	25	1,250*	80	3,000*
Decrease—Co B		7,750*					80	6,200*
Balances—December 31, 1934	$21,000	$58,550						
Total Adjustments Company B		6,550*		$6,550*				
Company A						$2,650*		$3,120*
Adjusted Balances	$21,000	$52,000						
Eliminations.								
A's 25% and 80%	$ 5,250	$41,600						
B's 75%	15,750							
Minority Interest—20%		10,400						
	$21,000	$52,000						

* Deductions

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Consolidated Balance Sheet Working Papers

December 31, 1934

(Investments Carried at Cost)

Assets	Company A	Company B	Company C	Adjustments Debit	Adjustments Credit	Eliminations	Minority	Consolidated
Cash	60,000 00	20,150 00	15,000 00					95,150 00
Accounts Receivable	90,000 00	50,000 00	40,000 00					180,000 00
Inventories	60,950 00	49,400 00	41,000 00					151,350 00
Investment in Company *B*—80 %—Cost	136,000 00							
Adjustment					3,120 00(A)			
Eliminate								
Capital Stock						80,000 00(a)		
Surplus						41,600 00(c)		
Goodwill								11,280 00G
Investment in Company *C*—25 %—Cost	22,000 00							
Adjustment					2,650 00(A)			
Eliminate								
Capital Stock						12,500 00(b)		
Surplus						5,250 00(d)		
Goodwill								1,600 00G
Investment in Company *C*—75 %—Cost		64,000 00						
Adjustment					6,550 00(B)			
Eliminate								
Capital Stock						37,500 00(b)		
Surplus						15,750 00(d)		
Goodwill								4,200 00G
	368,950 00	183 550 00	96,000 00			192,600 00		443 580 00
Liabilities								
Accounts Payable	25,000 00	25,000 00	25,000 00					75,000 00
Capital Stock								
Company *A*	150,000 00							150,000 00
Company *B*		100,000 00				80,000 00(a)	20,000 00	
Company *C*			50,000 00			50,000 00(b)		
Surplus								
Company *A*	193,950 00			5,770 00(A)				188,180 00
Company *B*		58,550 00		6,550 00(B)		41,600 00(c)	10,400 00	
Company *C*			21,000 00			21,000 00(d)		
Minority Interest							30,400 00	30,400 00
	368,950 00	183,550 00	96,000 00	12 320 00	12 320 00	192,600 00		443 580 00

Fifth illustration: Reciprocal stockholdings.—In this illustration, Company A holds controlling interests in Companies B and C Company B holds 15% (and later 20%) of the stock of Company C. Company C holds 20% (and later 30%) of the stock of Company B. These reciprocal stockholdings between B and C involve certain complications in the computation of the amounts of intercompany profits to be taken up. The illustration comprises the following statements, working papers, and comments:

(A) *On the assumption that subsidiary profits, losses, and dividends are taken up by the parent companies:*

Pages 320 and 321.—Statement of Surplus and Investment accounts on the books of the three companies.

Pages 322 and 323.—Comments on computation of profits taken up. Especial attention is directed to these comments because they illustrate and explain the algebraic computation that is required for the determination of profits applicable to intercompany stockholdings.

Page 324.—Consolidated balance sheet working papers. (Note the Goodwill column for assembling the various goodwill elements.)

Page 325.—Proof of the goodwill elements in the various stock purchases.

(B) *On the assumption that the investments are carried at cost.*

Page 326.—Statement of Surplus and Investment accounts on the books of the three companies.

Each company merely takes up the dividends received from its subsidiaries.

Page 327.—Work sheet to determine adjustments of Surplus and Investment accounts.

Pages 328 and 329.—Comments on the adjustments in the work sheet.

Page 330.—Consolidated balance sheet working papers.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Statement of Surplus and Investment Accounts

(Subsidiary Profits, Losses, and Dividends Taken Up)

	Company *C*			Company *B*			Company *A*				
	Investment In Company *B*			Investment In Company *C*			Investment In Company *C*		Investment In Company *B*		
	Per Cent	Amount	Surplus	Per Cent	Amount	Surplus	Per Cent	Amount	Per Cent	Amount	Surplus
Dec 31, 1929—*A* buys 60 % of *B*						$50,000 00			60 %	$ 95,000 00	$100,000 00
1930 Profits Company *B*						15,000 00				9,000 00	9,000 00
Company *A*											25,000 00
Dividends Company *B*						6,000 00*				3,600 00*	
Company *A*											12,000 00*
Dec 31—*A* buys 70 % of *C*			$60,000 00				70 %	$115,000 00			
Balances			$60,000 00			$59,000 00	70 %	$115,000 00	60 %	$100,400 00	$122,000 00
1931 Profits Company *C*			10,000 00					7,000 00			7,000 00
Company *B*						15 000 00				9,000 00	9,000 00
Company *A*											25,000 00
Dividends. Company *C*			6,000 00*					4,200 00*			
Company *B*						6,000 00*				3,600 00*	
Company *A*											12,000 00*
Dec 31—*B* buys 15 % of *C*				15 %	$25,000 00						
Balances			$64,000 00	15 %	$25,000 00	$68,000 00	70 %	$117,800 00	60 %	$105,800 00	$151,000 00
1932 Profits Company *C*			10,000 00		1,500 00	1,500 00		7,000 00		900 00	7,900 00
Company *B*						15,000 00				9,000 00	9,000 00
Company *A*											25,000 00
Dividends. Company *C*			6,000 00*		900 00*			4,200 00*			
Company *B*						6,000 00*				3,600 00*	
Company *A*											12,000 00*
Dec 31—*C* buys 20 % of *B*	20 %	$36,000 00									
Balances.......	20 %	$36,000 00	$68,000 00	15 %	$25,600 00	$78,500.00	70 %	$120,600.00	60 %	$112,100 00	$180,900 00

1933: Profits			10,000 00			15,000 00					25,000 00
Subsidiary profits taken up		3,402 06	3,402 06		2,010 31	2,010 31		9,381 44		10,206 19	19,587 63
Dividends Company C			6,000 00*		900 00*			4,200 00*			
Company B		1,200 00*				6,000 00*				3,600 00*	
Company A											12,000 00*
Dec 31—C buys 10 % of B	10	20,000 00									
B buys 5 % of C				5	9,000 00						
A buys 5 % of B									5	10,000 00	
Balances	30 %	$58,202 06	$75,402 06	20 %	$35,710 31	$89,510 31	70 %	$125,781 44	65 %	$128,706 19	$213,487 63
1934 Profits			8,000 00*			15,000 00					25,000 00
Subsidiary profits taken up		4,276 60	4,276 60		744 68*	744 68*		2,606 38*		9,265 96	6,659 58
Dividends Company C			6,000 00*		1,200 00*			4,200 00*			
Company B		1,800 00*				6,000 00*				3,900 00*	
Company A											12,000 00*
Balances	30 %	$60,678 66	$65,678 66	20 %	$33,765 63	$97,765 63	70 %	$118,975 06	65 %	$134,072 15	$233 147 21

* Deductions

Comments on computation of profits taken up by parent companies (*as shown in the statement on page* 320).—The profits taken up by the parent companies are computed as follows.

1930—Company *A* owns 60% of the stock of Company *B*, and takes up 60% of Company *B*'s $15,000.00 profit, or $9,000 00.

1931—Company *A* owns 60% of the stock of Company *B*, and takes up 60% of its profit. *A* owns 70% of the stock of Company *C*, and takes up 70% of its profit.

1932—Company *B* owns 15% of the stock of Company *C*, and takes up 15% of its profit, or $1,500 00.

Company *A* owns 60% of the stock of Company *B*, and takes up 60% of *B*'s $15,000 00 profit, or $9,000 00, it also takes up 60% of the $1,500 00 (Company *C* profit) taken up by Company *B*

Company *A* owns 70% of the stock of Company *C*, and takes up 70% of its profit, or $7,000 00.

1933—The intercompany holdings are as follows:

A owns 60% of *B*.
A owns 70% of *C*.
B owns 15% of *C*.
C owns 20% of *B*.

The profits of Companies *B* and *C* are affected by their reciprocal stockholdings. That is, Company *B*'s profits were $15,000.00 plus its 15% of the profits of Company *C*; and Company *C*'s profits were $10,000.00 plus its 20% interest in the profits of Company *B*. The profits of the two companies are therefore determined as follows:

Let B = Profits of Company B
Let C = Profits of Company C

$$
\begin{aligned}
\text{Then } B &= \$15{,}000\ 00 + .15\,C \\
C &= \$10{,}000\ 00 + \ 20\,B \\
C &= \$10{,}000\ 00 + .2\,(\$15{,}000\ 00 + \ 15\,C) \\
C &= \$10{,}000\ 00 + \$3{,}000\ 00 + \ 03\,C \\
.97C &= \$13{,}000\ 00 \\
C &= \$13{,}402\ 06
\end{aligned}
$$

Since *C*'s profits from its own operations were $10,000 00, the addition to be made on account of intercompany profits is $13,402.06 minus $10,000.00, or $3,402.06.

Note C's debit to Investment in Company B and credit to Surplus for this amount.

$$B = \$15{,}000\ 00 + .15\ C$$
$$B = \$15{,}000\ 00 + (\ 15 \text{ of } \$13{,}402\ 06)$$
$$B = \$15{,}000\ 00 + \$2{,}010\ 31 = \$17{,}010\ 31$$

Company B's adjustment for intercompany profits is \$2,010.31. Note B's debit to Investment in C and credit to Surplus for this amount.

Company A owns 70% of the stock of Company C; it therefore takes up 70% of Company C's profit of \$13,402.06, or \$9,381.44. Company A owns 60% of the stock of Company B; it therefore takes up 60% of Company B's profit of \$17,010.31, or \$10,206.19.

1934—The intercompany stockholdings are:

A owns 65% of B
A owns 70% of C.
B owns 20% of C.
C owns 30% of B.

The profits of B and C are computed as follows:

$$B\text{'s profit} = B = \$15{,}000\ 00 + \ 20\ C$$
$$C\text{'s profit (loss)} = C = -\$8{,}000\ 00 + \ 30\ B$$
$$\text{Then } C = -\$8{,}000\ 00 + \ 30\ (\$15{,}000\ 00 + \ 20\ C)$$
$$C = -\$8{,}000\ 00 + \$4{,}500.00 + .06\ C$$
$$.94C = -\$3{,}500\ 00$$
$$C = -\$3{,}723\ 40$$

Since C's loss from its own operations was \$8,000.00 and its loss after taking up its share of B's profit is \$3,723.40, the share of B's profit taken up was \$4,276.60. Note adjustment of accounts on C's books.

$$B = \$15{,}000\ 00 + \ 20\ C$$
$$= \$15{,}000\ 00 + (\ 2 \text{ of } -\$3{,}723\ 40)$$
$$= \$15{,}000\ 00 - \$744\ 68$$
$$= \$14{,}255.32$$

B takes up \$744.68 as its share of C's loss. Note adjustment of accounts on B's books.

Company A owns 65% of the stock of Company B, and takes up 65% of B's profit of \$14,255.32, or \$9,265 96. Company A owns 70% of the stock of Company C, and takes up 70% of its \$3,723.40 loss, or \$2,606.38.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Balance Sheet Working Papers
December 31, 1934
(Subsidiary Profits, Losses, and Dividends Taken Up)

Assets	Company *A*	Company *B*	Company *C*	Eliminations	Goodwill	Consolidated Balance Sheet
Cash	25,100 00	20,000 00	15,000 00			60,100 00
Accounts Receivable	50,000 00	69,000 00	30,000 00			149,000 00
Inventories	125,000 00	90,000 00	75,000 00			290,000 00
Investment in Company *B*—65 %	134,072 15					
Eliminate Capital Stock				65,000 00(A)		
Surplus				63,547 66(C)		
Goodwill					5,524 49	
Investment in Company *C*—70 %	118,975 06					
Eliminate Capital Stock				70,000 00(B)		
Surplus				45,975 06(D)		
Goodwill					3,000 00	
Investment in Company *C*—20 %		33,765 63				
Eliminate Capital Stock				20,000 00(B)		
Surplus				13,135 73(D)		
Goodwill					629 90	
Investment in Company *B*—30 %			60,678 66			
Eliminate Capital Stock				30,000 00(A)		
Surplus				29,329 69(C)		
Goodwill					1,348 97	
Goodwill	10,000 00	5,000 00	5,000 00		20,000 00	
Total Goodwill					30 503 36	30,503 36
	463,147 21	217,765 63	185,678 66	336,988 14		529 603 36
Liabilities					Minority	
Accounts Payable	30,000 00	20,000 00	20,000 00			70,000 00
Capital Stock						
Company *A*	200 000 00					200,000 00
Company *B*		100,000 00		95,000 00(A)	5,000 00	
Company *C*			100,000 00	90,000 00(B)	10,000 00	
Surplus:						
Company *A*	233,147 21					233,147 21
Company *B*		97,765 63		92,877 35(C)	4,888 28	
Company *C*			65,678 66	59,110 79(D)	6 567 87	
Total Minority Interest					26,456 15	26,456 15
	463,147 21	217,765 63	185,678 66	336,988 14		529,603 36

Proof of Goodwill Elements in Stock Purchases

(As Shown in the Consolidated Working Papers on Page 324)

	Stock and Surplus of Subsidiary at Acquisition: Total	Stock and Surplus of Subsidiary at Acquisition: Amount Acquired	Cost of Stock	Goodwill
A's investment in *B*:				
Purchase of December 31, 1929—60%	$150,000 00	$ 90,000 00	$ 95,000 00	$5,000 00
Purchase of December 31, 1933— 5%	189,510 31	9,475 51	10,000 00	524 49
Total				$5,524 49
A's investment in *C*				
Purchase of December 31, 1930—70%	160,000 00	112,000 00	115,000 00	$3,000 00
B's investment in *C*:				
Purchase of December 31, 1931—15%	164,000 00	24,600 00	25,000 00	$ 400 00
Purchase of December 31, 1933— 5%	175,402 06	8,770 10	9,000 00	229 90
Total				$ 629 90
C's investment in *B*				
Purchase of December 31, 1932—20%	178 500 00	35,700 00	36,000 00	$ 300 00
Purchase of December 31, 1933—10%	189,510 31	18,951 03	20,000 00	1,048 97
Total				$1,348 97

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Statement of Surplus and Investment Accounts

(Investments Carried at Cost)

	Company C			Company B			Company A				
	Investment In Company B			Investment In Company C			Investment In Company C		Investment In Company B		
	Per Cent	Cost	Surplus	Per Cent	Cost	Surplus	Per Cent	Cost	Per Cent	Cost	Surplus
December 31, 1929—*A* buys 60 % of *B*						$50 000			60 %	$ 95,000	$100,000
1930 Profits						15,000					25,000
Dividends Company *B*						6,000*					3,600
Company *A*											12,000*
December 31—*A* buys 70 % of *C*			$60 000				70 %	$115,000			
Balances			$60,000			$59,000	70 %	$115,000	60 %	$ 95,000	$116,600
1931 Profits			10,000			15,000					25,000
Dividends Company *C*			6,000*								4,200
Company *B*						6,000*					3,600
Company *A*											12,000*
December 31—*B* buys 15 % of *C*				15 %	$25,000						
Balances			$64,000	15 %	$25,000	$68,000	70 %	$115,000	60 %	$ 95,000	$137,400
1932 Profits			10,000			15,000					25,000
Dividends Company *C*			6,000*			900					4,200
Company *B*						6,000*					3 600
Company *A*											12,000*
December 31—*C* buys 20 % of *B*	20 %	$36,000									
Balances	20 %	$36,000	$68 000	15 %	$25,000	$77,900	70 %	$115,000	60 %	$ 95,000	$158,200
1933 Profits			10,000			15,000					25 000
Dividends Company *C*			6,000*			900					4 200
Company *B*			1,200			6,000*					3,600
Company *A*											12,000*
December 31—*C* buys 10 % of *B*	10	20,000									
B buys 5 % of *C*				5	9,000						
A buys 5 % of *B*									5	10,000	
Balances	30 %	$56,000	$73,200	20 %	$34,000	$87,800	70 %	$115,000	65 %	$105,000	$179,000
1934 Profits			8,000*			15,000					25,000
Dividends Company *C*			6 000*			1,200					4,200
Company *B*			1,800			6,000*					3,900
Company *A*											12 000*
Balances.	30 %	$56,000	$61,000	20 %	$34,000	$98 000	70 %	$115,000	65 %	$105 000	$200,100

* Deduction

Work Sheet to Determine Adjustments of Parent Companies' Surplus and Investment Accounts

Acquisition Dates	Subsidiary Surplus Accounts: Company *C*	Subsidiary Surplus Accounts: Company *B*	Company *C* — Investment In Company *B*: Per Cent	Company *C* — Investment In Company *B*: Amount	Company *B* — Investment In Company *C*: Per Cent	Company *B* — Investment In Company *C*: Amount	Company *A* — Investment In Company *C*: Per Cent	Company *A* — Investment In Company *C*: Amount	Company *A* — Investment In Company *B*: Per Cent	Company *A* — Investment In Company *B*: Amount
Dec 31, 1929—*A* buys 60 % of *B*		$50,000 00								
Increase—1930		9,000 00							60 %	$ 5,400 00
Dec. 31, 1930—*A* buys 70 % of *C*	$60,000 00	$59,000 00								
Increase—Company *C*	4,000 00						70 %	$2,800 00		
Increase—Company *B*		9,000 00							60	5,400 00
Dec 31, 1931—*B* buys 15 % of *C*	$64,000 00	$68,000 00								
Increase—Company *C*	4,000 00				15 %	$ 600 00	70	2 800 00	60	360 00
Increase—Company *B*		9 900 00							60	5,940 00
Dec 31, 1932—*C* buys 20 % of *B*	$68,000 00	$77,900 00								
Increase—Company *C*	5,200 00									
Increase—Company *B*		9,900 00	20 %	$2,202 06	15	1,110 31	70	5,181 44	60	6,606 19
Dec 31, 1933—*C* buys 10 % of *B*	$73,200 00	$87,800 00								
B buys 5 % of *C*										
A buys 5 % of *B*										
Decrease—Company *C*	12,200 00*									
Increase—Company *B*		10,200 00	30	2,476 60	20	1,944 68*	70	6,806 38*	65	5,365 96
Balances—December 31, 1934	$61,000 00	$98,000 00								
Adjustments	4,678 66	234 37*		$4,678 66		$ 234 37*		$3,975 06		$29,072 15
Adjusted Balances	$65 678 66	$97,765 63								
Company *A*'s 70 % and 65 %	$45,975 06	$63,547 66								
Company *B*'s 20 %	13 135 73									
Company *C*'s 30 %		29 329 69								
Total Elimination	$59,110 79	$92,877 35								
Minority—10 % and 5 %	6,567 87	4,888 28								
Total	$65,678 66	$97,765 63								

* Deduction

Comments on the adjustments in the work sheet.—The amounts of the annual adjustments are computed as follows.

1930—Company A owned 60% of Company B, therefore the adjustment is for 60% of the \$9,000 00 increase in Company B's surplus.

1931—Company A owned 70% of Company C and 60% of B; the adjustments are therefore 70% and 60%, respectively, of the \$4,000.00 and \$9,000 00 increases in surplus

1932—Company B takes up 15% of the \$4,000.00 increase in Company C's surplus, or \$600 00; Company A, because of its 60% interest in Company B, takes up 60% of the \$600.00 taken up by Company B Company A, because of its 70% interest in Company C, takes up 70% of the \$4,000 00 increase in Company C's surplus. Company A also takes up 60% of the \$9,900.00 increase in the surplus of Company B.

1933—Because of the reciprocal stockholdings between Companies C and B, the adjustments are computed as follows.

$$\begin{aligned}
C &= \$5{,}200\ 00 + .20B = \text{Increase in surplus of Company } C \\
B &= \$9{,}900\ 00 + \ 15C = \text{Increase in surplus of Company } B \\
C &= \$5{,}200\ 00 + \ 20(\$9{,}900\ 00 + \ 15C) \\
&= \$5{,}200\ 00 + \$1{,}980\ 00 + \ 03C \\
.97C &= \$7{,}180\ 00 \\
C &= \$7{,}402\ 06 \\
B &= \$9{,}900\ 00 + \ 15C \\
&= \$9{,}900\ 00 + (\ 15 \times \$7{,}402\ 06) \\
&= \$9{,}900\ 00 + \$1{,}110\ 31 \\
&= \$11{,}010\ 31
\end{aligned}$$

Then C's 20% of the increase in B's surplus is 20% of \$11,010.31, or \$2,202 06

B's 15% of the increase in C's surplus is 15% of \$7,402 06, or \$1,110 31

A's 70% of the increase in C's surplus is 70% of \$7,402 06, or \$5,181 44

A's 60% of the increase in B's surplus is 60% of \$11,010 31, or \$6,606 19.

1934—Again, the reciprocal stockholdings require the computation of the adjustments algebraically.

$$\begin{aligned}
C &= -\$12{,}200\ 00 + \ 30B \\
B &= \$10{,}200\ 00 + \ 20C \\
C &= -\$12{,}200\ 00 + \ 3(\$10{,}200\ 00 + \ 2C) \\
&= -\$12{,}200.00 + \$3{,}060\ 00 + \ 06C
\end{aligned}$$

$.94C = -\$9,140\ 00$
$C = -\$9,723\ 40$, Decrease in surplus of Company C
$B = \$10,200\ 00 + .20C$
$= \$10,200\ 00 + (.2 \times -\$9,723\ 40)$
$= \$10,200\ 00 - \$1,944.68$
$= \$8,255\ 32$

Then C's 30% of the increase in B's surplus is 30% of \$8,255 32, or \$2,476 60.

B's 20% of the decrease in C's surplus is 20% of \$9,723 40, or \$1,944 68

A's 70% of the decrease in C's surplus is 70% of \$9,723 40, or \$6,806 38.

A's 65% of the increase in B's surplus is 65% of \$8,255.32, or \$5,365.96

The consolidated working papers appear on the following page.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Balance Sheet Working Papers
December 31, 1934
(Investments Carried at Cost)

Assets	Company *A*	Company *B*	Company *C*	Adjustments (Add—Deduct)*	Eliminations	Goodwill	Consolidated Balance Sheet
Cash	25,100 00	20,000 00	15,000 00				60,100 00
Accounts Receivable	50,000 00	69,000 00	30,000 00				149,000 00
Inventories	125,000 00	90,000 00	75,000 00				290,000 00
Investment in Company *B*—65 %—Cost	105,000 00			29 072 15 (1)			
Eliminate Capital Stock					65,000 00(A)		
Surplus					63,547 66(C)		
Goodwill						5,524 49	
Investment in Company *C*—70 %—Cost	115,000 00			3,975 06 (1)			
Eliminate Capital Stock					70,000 00(B)		
Surplus					45,975 06(D)		
Goodwill						3,000 00	
Investment in Company *C*—20 %—Cost		34,000 00		234 37*(2)			
Eliminate Capital Stock					20,000 00(B)		
Surplus					13,135 73(D)		
Goodwill						629 90	
Investment in Company *B*—30 %—Cost			56,000 00	4,678 66 (3)			
Eliminate Capital Stock					30,000 00(A)		
Surplus					29,329 69(C)		
Goodwill						1,348 97	
Goodwill	10,000 00	5,000 00	5,000 00			20,000 00	
Total Goodwill						30 503 36	30,503 36
	430,100 00	218,000 00	181 000 00	37,491 50	336 988 14		529 603 36
Liabilities						Minority	
Accounts Payable	30,000 00	20,000 00	20,000 00				70,000 00
Capital Stock							
Company *A*	200,000 00						200,000 00
Company *B*		100,000 00			95,000 00(A)	5,000 00	
Company *C*			100,000 00		90,000 00(B)	10,000 00	
Surplus							
Company *A*	200,100 00			33,047 21 (1)			233,147 21
Company *B*		98,000 00		234 37*(2)	92,877 35(C)	4,888 28	
Company *C*			61,000 00	4,678 66 (3)	59,110 79(D)	6,567 87	
Total Minority Interest						26,456 15	26 456 15
	430,100 00	218 000 00	181 000 00	37,491 50	336,988 14		529 603 36

CHAPTER 49

CONSOLIDATED BALANCE SHEET, SURPLUS STATEMENT, PROFIT AND LOSS STATEMENT, AND SUPPORTING STATEMENTS

Working Papers: General Form

The consolidated balance sheet is frequently accompanied by a consolidated surplus statement, a consolidated profit and loss statement, and supporting statements such as a statement of cost of goods sold and schedules of expenses.

Before studying the detailed illustrations in this chapter, the student should note the general organization of the working papers in which the data for these statements are assembled. Refer, therefore, to the working papers on pages 334 and 335, and note the following matters:

- A separate section of the working papers is devoted to each consolidated statement to be prepared.
- The following columns are used:
  - Company statements —one column each.
  - Adjustments and eliminations—two columns.
  - Minority interest —one column.
  - Consolidated statements —one column.
- Balances are forwarded from one section of the working papers to a succeeding section, thus:
  - Cost of goods sold—forwarded from the Cost of Goods Sold section to the Profit and Loss section.
  - Net income—forwarded from the Profit and Loss section to the Surplus section.
  - Surplus at end of period—forwarded from the Surplus section to the Liabilities and Net Worth section.

Outline of Illustrations

Four principal illustrative cases are presented in this chapter, and consolidated statements are required for the year ended December 31, 1934. In each of these cases it is

assumed that Company P owns 90% of the stock of Company S, which Company P acquired on January 1, 1932; the surplus of Company S at the date of acquisition was $10,000.00. The four cases differ as follows:

First and second illustrations.—The parent company has taken up its share of subsidiary profits, losses, and dividends through the Investment account:
First illustration: No dividends were paid during 1934.
Second illustration: Dividends were paid during 1934.

Third and fourth illustrations.—The parent company is carrying the investment at cost:
Third illustration: No dividends were paid during 1934.
Fourth illustration: Dividends were paid during 1934.

First and second illustrations.—In the first two illustrations it is assumed that the parent company has taken up its share of subsidiary profits, losses, and dividends through the Investment account. The two illustrations differ only in the matter of dividends during 1934, the year for which the statements are being prepared.

First illustration. (*See working papers, pages* 334 *and* 335.)—The working papers for this illustration contain adjustments and eliminations described in detail in the following paragraphs.

Elimination A.—The student is already familiar with the procedure of making eliminations of intercompany balances in consolidated balance sheet working papers. If any nominal accounts contain debits or credits for intercompany transactions, the amounts of such intercompany items must be eliminated in the Cost of Goods Sold, Profit and Loss, or Surplus section of the working papers, so that the consolidated statements will reflect the results of transactions with outsiders only.

During 1934, Company S made sales of $25,000.00 to Company P. These were recorded in the Purchases account of Company P and in the Sales account of Company S. The intercompany sales are eliminated by elimination A, crediting Purchases in the Cost of Goods Sold section, and debiting Sales in the Profit and Loss section.

Elimination B.—Company S has $50,000.00 of capital stock, of which Company P owns $45,000.00. The intercompany

stockholding is eliminated in the Balance Sheet section, by elimination B, from the Capital Stock account of Company *S* and from the Investment account of Company *P*.

Adjustment C.—The first two illustrations do not contain any adjustments bearing this letter. Adjustment C appears only in the third and fourth illustrations.

Elimination D.—This is an elimination with which the student is already familiar; it eliminates the parent company's percentage of the subsidiary surplus.

The credit elimination from the Investment account is made in the usual way. If only a consolidated balance sheet were to be prepared, the offsetting debit would be eliminated from the subsidiary surplus in the balance sheet working papers, but since a consolidated surplus statement and a consolidated profit and loss statement are to be prepared, the debit must be apportioned between the surplus at the beginning of the period (in the surplus papers) and the changes during the period (in the profit and loss papers).

These elements of Company *S*'s surplus, and of Company *P*'s 90% interest therein, are detailed as follows.

	Company *S* Surplus	
	Total	Company *P*'s 90%
Surplus, December 31, 1933 . . .	$15,000 00	$13,500 00
Net Profit, 1934	10,000 00	9,000 00
Surplus, December 31, 1934 .	$25,000 00	$22,500 00

The elimination of Company *P*'s interest in the surplus of Company *S* is made as follows:

	Section of Working Papers	Debit	Credit
Surplus of Co *S* (as of Dec 31, 1933)	Surplus	$13,500	
Company *S* Profit	P & L	9,000	
Investment in Stock of Company *S*	Assets		$22,500

The debit to Surplus of Company *S* eliminates 90% of the subsidiary surplus on December 31, 1933; the parent company's surplus includes its share of the subsidiary's earnings to that date

The account Company *S* Profit is the account which Company *P* credited to take up its share of the income of Company *S* for 1934, this account balance must be eliminated because we shall carry the balances of the income and expense accounts of Company *S* to the Consolidated column, and the con-

Working papers for first illustration.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Working Papers
Year Ended December 31, 1934

	Company *P*	Company *S*	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority	Consolidated
Cost of Goods Sold						
Inventory, December 31, 1933	25,000 00	15,000 00				40,000 00
Purchases	100,000 00	80,000 00		25,000 00(A)		155,000 00
Total	125,000 00	95,000 00				195,000 00
Less Inventory, December 31, 1934	27,000 00	16,000 00				43,000 00
Cost of Goods Sold (Forward)	98,000 00	79,000 00		25,000 00		152,000 00
Profit and Loss						
Sales	125,000 00	100,000 00	25,000 00(A)			200,000 00
Less Cost of Goods Sold (Brought forward)	98,000 00	79,000 00		25,000 00		152,000 00
Gross Profit on Sales	27 000 00	21,000 00				48,000 00
Less Expenses	15,000 00	11,000 00				26,000 00
Net Profit	12,000 00	10,000 00				22,000 00
Company *S* Profit—90 %	9,000 00		9,000 00(D)			
Net Profit before Deduction of Minority Interest	21,000 00	10,000 00				22,000 00
Minority Interest—10 %					1,000 00	1,000 00
Net Income (Forward)	21,000 00	10,000 00	34,000 00	25,000 00	1,000 00	21,000 00

Surplus						
Surplus, December 31, 1933.						
Company P	39,000 00					39,000 00
Company S		15,000 00	13,500 00(D)		1,500 00	
Net Income (Brought forward)	21,000 00	10,000 00	34,000 00	25,000 00	1,000 00	21,000 00
Surplus, December 31, 1934 (Forward)	60,000 00	25,000 00	47,500 00	25,000 00	2,500 00	60,000 00
Assets						
Cash	35,000 00	29,000 00				64,000 00
Accounts Receivable	50,000 00	40,000 00				90,000 00
Inventory	27,000 00	16,000 00				43,000 00
Investment in Stock of Company S—90 %	70 500 00					
Eliminate						
Capital Stock				45,000 00(B)		
Surplus				22,500 00(D)		
Goodwill.						3,000 00
	182,500 00	85,000 00				200,000 00
Liabilities and Net Worth						
Accounts Payable	22,500 00	10,000 00				32,500 00
Capital Stock						
Company P	100,000 00					100,000 00
Company S		50,000 00	45,000 00(B)		5,000 00	
Surplus (Brought forward)	60,000 00	25,000 00	47,500 00	25,000 00	2,500 00	60,000 00
Total Minority Interest					7,500 00	7,500 00
	182,500 00	85,000 00	92,500 00	92,500 00		200,000 00

solidated income would be overstated if we also carried to that column the credit balance of the account on Company *P*'s books, representing its share of the income of Company *S*. The credit to the Investment account is the customary credit, with which the student is already thoroughly familiar.

Working papers Special features.—The student should study carefully the working papers on pages 334 and 335, to be sure that he understands the following matters:

(1) The meaning and purpose of each adjustment and elimination.
(2) The significance of each entry in the Minority column. Note that the $1,000.00 minority interest in the profits for the year is entered as a deduction in the Consolidated column of the Profit and Loss section, so that the final balance of the Consolidated column will represent the parent company's interest in the total profits for the year. Note also that the total of the Minority column in the Liabilities and Net Worth section is carried to the Consolidated column.
(3) The procedure of forwarding balances from one section of the working papers to a succeeding section.

Statements for first illustration.—The following statements were prepared from the foregoing working papers.

COMPANY *P* AND SUBSIDIARY *S* — Exhibit D

Consolidated Statement of Cost of Goods Sold

For the Year Ended December 31, 1934

Inventory, December 31, 1933	$ 40,000 00
Purchases	155,000 00
Total .	$195,000 00
Less Inventory, December 31, 1934	43,000 00
Cost of Goods Sold	$152,000 00

COMPANY *P* AND SUBSIDIARY *S* — Exhibit C

Consolidated Statement of Profit and Loss

For the Year Ended December 31, 1934

Sales	$200,000 00
Less Cost of Goods Sold (Exhibit D)	152,000 00
Gross Profit on Sales	$ 48,000 00
Less Expenses.	26,000 00
Net Income	$ 22,000 00
Less Minority Interest in Subsidiary Profit	1,000 00
Consolidated Net Income—Parent Company's Portion	$ 21,000 00

COMPANY *P* AND SUBSIDIARY *S* — Exhibit B

Consolidated Surplus Statement

For the Year Ended December 31, 1934

Surplus, December 31, 1933	$39,000 00
Add Net Income (Exhibit C)	21,000 00
Surplus, December 31, 1934	$60,000 00

COMPANY *P* AND SUBSIDIARY *S* — Exhibit A

Consolidated Balance Sheet

December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 64,000	Accounts Payable		$ 32,500
Accounts Receivable	90,000	Minority Interest		7,500
Inventory	43,000	Net Worth		
Goodwill	3,000	Capital Stock	$100,000	
		Surplus (Ex. B)	60,000	160,000
	$200,000			$200,000

Second illustration. (*See working papers, page 338.*)—The facts on which this illustration is based are the same as those in the first illustration, with one exception: Dividends were paid during 1934. Eliminations A and B are the same as in the first illustration. Adjustment C was not required in the first illustration and is not required in this illustration.

Elimination D.—The elimination of the parent company's percentage of the subsidiary's surplus is slightly different from the corresponding elimination in the first illustration because the subsidiary's surplus has been reduced during the year by the payment of a dividend. The elements affecting the surplus of Company *S*, and Company *P*'s 90% interest therein, are as follows:

	Company *S* Surplus	
	Total	Company *P*'s 90%
Surplus, December 31, 1933	$15,000 00	$13,500 00
Net Profit—1934	10,000 00	9,000 00
Dividend Paid	3,000 00*	2,700 00*
Surplus, December 31, 1934	$22,000 00	$19,800 00

* Deductions

The elimination is made as follows:

	Section	Debit	Credit
Surplus of Co *S* (as of December 31, 1933)	Surplus	$13,500	
Company *S* Profit	P. & L	9,000	
Dividend Paid	Surplus		$ 2,700
Investment in Stock of Company *S*	Assets		19,800

Working papers for second illustration.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Working Papers—Year Ended December 31, 1934

	Company P	Company S	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority	Consolidated
(Cost of Goods Sold and Profit and Loss sections—same as in first illustration)						
SURPLUS						
Surplus, December 31, 1933						
Company *P*	39,000 00					39,000 00
Company *S*		15,000 00	13,500 00(D)		1,500 00	
Net Income (Brought forward)	21,000 00	10,000 00	34,000 00	25,000 00	1,000 00	21,000 00
Total ...	60,000 00	25,000 00			2,500 00	60,000 00
Less Dividends Paid						
Company *P*	6,000 00					6,000 00
Company *S*		3,000 00		2,700 00(D)	300 00	
Surplus, December 31, 1934 (Forward)	54,000 00	22,000 00	47,500 00	27,700 00	2,200 00	54,000 00
ASSETS						
Cash	31,700 00	26,000 00				57,700 00
Accounts Receivable	50,000 00	40,000 00				90,000 00
Inventory	27,000 00	16,000 00				43,000 00
Investment in Company *S*—90%.	67,800 00					
Eliminate						
Capital Stock				45,000 00(B)		
Surplus				19,800 00(D)		
Goodwill						3,000 00
	176,500 00	82,000 00				193,700 00
LIABILITIES AND NET WORTH						
Accounts Payable.	22,500 00	10,000 00				32,500 00
Capital Stock:						
Company *P*	100,000 00					100,000 00
Company *S*		50,000 00	45,000 00(B)		5,000 00	
Surplus (Brought forward)	54,000 00	22,000 00	47,500 00	27,700 00	2,200 00	54,000 00
Total Minority Interest					7,200 00	7,200 00
	176,500 00	82,000 00	92,500 00	92,500 00		193,700 00

Statements for second illustration.—Since this illustration differs from the preceding one only in the payment of dividends, the statements for the two illustrations differ only in the dividends and closing surplus in the surplus statement, and the cash, minority interest, and surplus in the balance sheet.

COMPANY *P* AND SUBSIDIARY *S* Exhibit D

Consolidated Statement of Cost of Goods Sold

For the Year Ended December 31, 1934

Inventory, December 31, 1933	$ 40,000 00
Purchases	155,000 00
Total	$195,000 00
Less Inventory, December 31, 1934	43,000 00
Cost of Goods Sold	$152,000 00

COMPANY *P* AND SUBSIDIARY *S* Exhibit C

Consolidated Statement of Profit and Loss

For the Year Ended December 31, 1934

Sales	$200,000 00
Less Cost of Goods Sold (Exhibit D)	152,000 00
Gross Profit on Sales	$ 48,000 00
Less Expenses	26,000 00
Net Income	$ 22,000 00
Less Minority Interest in Subsidiary Profit	1,000 00
Consolidated Net Income—Parent Company's Portion	$ 21,000 00

COMPANY *P* AND SUBSIDIARY *S* Exhibit B

Consolidated Surplus Statement

For the Year Ended December 31, 1934

Surplus, December 31, 1933	$39,000 00
Add Net Income (Exhibit C)	21,000 00
Total	$60,000 00
Deduct Dividends Paid	6,000 00
Surplus, December 31, 1934	$54,000 00

COMPANY *P* AND SUBSIDIARY *S* Exhibit A

Consolidated Balance Sheet

December 31, 1934

Assets		Liabilities and Net Worth		
Cash	$ 57,700	Accounts Payable		$ 32,500
Accounts Receivable	90,000	Minority Interest		7,200
Inventory	43,000	Net Worth		
Goodwill	3,000	Capital Stock	$100,000	
		Surplus (Ex B)	54,000	154,000
	$193,700			$193,700

Third and fourth illustrations.—The two following illustrations are the same as the first and second illustrations, respectively, with one exception. It is now assumed that the parent company is carrying the subsidiary investment at cost. Eliminations A and B are the same as in the first two illustrations. An adjustment, C, is now necessary to take up the parent company's percentage of the increase in the subsidiary surplus since acquisition. After this adjustment is made, the D eliminations can be made as in the preceding illustrations.

Third illustration. (*See working papers, page* 341.)—In this illustration it is assumed that no dividends were paid during 1934. It is therefore the same as the first illustration, except that the parent company has not taken up its share of the increase in the subsidiary surplus since acquisition This increase includes the elements detailed in the following summary:

	Company S Surplus	
	Total	Company P's 90%
Increase Prior to Current Year		
Surplus, December 31, 1933	$15,000 00	
Surplus at Date of Acquisition	10,000 00	
Increase Prior to Current Year	$ 5,000 00	$ 4,500.00
Increase During 1934		
Net Income	10,000 00	9,000 00
Total	$15,000 00	$13,500 00

Adjustment C.—Because the parent company has not taken up these elements of increase in the subsidiary's surplus since the date of acquisition, the parent company's accounts in this illustration differ from those in the first illustration in the following particulars

Investment in Stock of Company S:	
Balance in first illustration	$70,500 00
Balance in third illustration	57,000 00
Difference—equal to Company P's share of increase in subsidiary surplus since acquisition	$13,500 00
Surplus (as of December 31, 1933)	
Balance in first illustration	$39,000 00
Balance in third illustration	34,500 00
Difference—equal to Company P's share of increase in subsidiary surplus in prior periods	$ 4,500 00

Working papers for third illustration.

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Working Papers—Year Ended December 31, 1934

(Cost of Goods Sold Section—same as in first illustration)	Company *P*	Company *S*	Adjustments and Eliminations: Debit	Adjustments and Eliminations: Credit	Minority	Consolidated
PROFIT AND LOSS						
Sales	125,000.00	100,000 00	25,000.00(A)			200,000 00
Less Cost of Goods Sold (Brought forward)	98,000 00	79,000 00		25,000.00		152,000 00
Gross Profit on Sales	27,000 00	21,000 00				48,000 00
Less Expenses	15,000 00	11,000 00				26,000 00
Net Profit	12,000 00	10,000 00				22,000 00
Company *S* Profit—90 %			9,000 00(D)	9,000 00(C)		
Net Profit before Deduction of Minority Interest	12,000 00	10,000 00				22,000 00
Minority Interest—10 %					1,000 00	1,000 00
Net Income (Forward)	12,000 00	10,000 00	34,000 00	34,000 00	1,000 00	21,000 00
SURPLUS						
Surplus, December 31, 1933						
Company *P*	34,500 00			4,500 00(C)		39,000 00
Company *S*		15,000 00	13,500 00(D)		1 500 00	
Net Income (Brought forward)	12 000 00	10,000 00	34,000 00	34,000 00	1,000 00	21,000 00
Surplus—December 31, 1934 (Forward)	46,500 00	25,000 00	47,500 00	38,500 00	2,500 00	60 000 00
ASSETS						
Cash	35,000 00	29,000 00				64,000 00
Accounts Receivable	50,000 00	40,000 00				90,000 00
Inventory	27,000 00	16,000 00				43,000 00
Investment in Stock of Company *S*—90 %—At Cost	57,000 00					
Add 90 % of Increase in Company *S* Surplus			13,500 00(C)			
Eliminate						
Capital Stock				45,000 00(B)		
Surplus				22,500 00(D)		
Goodwill						3,000 00
	169,000 00	85,000 00				200,000 00
LIABILITIES AND NET WORTH						
Accounts Payable	22,500 00	10,000 00				32,500 00
Capital Stock						
Company *P*	100,000 00					100,000 00
Company *S*		50 000 00	45,000.00(B)		5,000 00	
Surplus (Brought forward)	46,500 00	25,000 00	47,500 00	38,500 00	2,500 00	60,000 00
Total Minority Interest					7,500 00	7,500 00
	169,000 00	85,000 00	106 000 00	106,000 00		200,000 00

Company S Profit	
Balance in first illustration (representing parent company's credit to income for its share of the profit of Company S during 1934) ..	\$ 9,000 00
No similar account appears in the working papers of the third illustration	—
Difference—equal to Company P's share of the subsidiary's net income for 1934 . . .	\$ 9,000 00

The parent company's accounts in this illustration can be adjusted to agree with those in the first illustration, by applying the following adjusting entry in the working papers:

	Section	Debit	Credit
Investment in Stock of Company S	Assets	\$13,500 00	
Surplus (as of December 31, 1933)	Surplus		\$4,500 00
Company S Profit .	P & L.		9,000 00

The \$13,500 00 debit to the Investment account takes up the parent company's percentage of the total increase in the subsidiary surplus since acquisition; the \$4,500 00 credit to Surplus takes up the parent company's percentage of the increase in the subsidiary surplus prior to the current year; and the \$9,000 00 credit to Company S Profit sets up the account which appeared on the parent company's books in the first illustration as representing the parent company's share of the subsidiary profit for 1934. In other words, by applying this adjustment in the working papers, the parent company's account balances are brought into agreement with those in the first illustration; elimination D is therefore the same as in the first illustration.

Statements for third illustration.—The first and third illustrations are the same except that in the first illustration the parent company took up its share of subsidiary profits, losses, and dividends through the Investment account, whereas in the third illustration the investment was carried at cost. Adjustment C adjusted the accounts of the third illustration to agree with those of the first illustration Therefore the statements for the third illustration are the same as those for the first illustration. (See pages 336 and 337.)

Fourth illustration.—(*See working papers, pages* 344 *and* 345.)—In this illustration it is assumed that dividends were paid during 1934 This illustration is therefore the same as the second illustration, except that the parent company has not taken up its share of the increase in subsidiary surplus since acquisition.

Adjustment C.—The increase in the subsidiary surplus since acquisition includes the following elements:

	Company S Surplus	
	Total	Company P's 90%
Increase Prior to Current Year		
Surplus, December 31, 1933	$15,000 00	
Surplus at Date of Acquisition	10,000 00	
Increase Prior to Current Year	$ 5,000 00	$ 4,500 00
Changes During 1934:		
Net Income	10,000 00	9,000 00
Less Dividends Paid	3,000 00*	2,700 00*
Total	$12,000 00	$10,800 00

* Deductions

The adjustments in the working papers are as follows.

	Section	Debit	Credit
Investment in Stock of Company S	Assets	$10,800 00	
Dividend from Company S	P & L	2,700 00	
Surplus (as of December 31, 1933)	Surplus		$4,500 00
Company S Profit	P. & L		9,000 00

The debit to the Investment account takes up Company A's 90% of the increase in the subsidiary's surplus since the date of acquisition

Company P has credited Dividend from Company S with the $2,700 00 dividend received during the year, and regards this amount as income; the adjusting entry debits this account to eliminate it, and sets up, instead, the $9,000.00 credit to Company S Profit, representing Company P's percentage of the income earned by the subsidiary during the year.

The credit to Surplus takes up, in the surplus of Company P, as of December 31, 1933, 90% of the increase in Company S surplus between the date of acquisition and December 31, 1933

In other words, by applying this adjustment in the working papers, Company P's accounts are adjusted to agree with those in the second illustration, in which the subsidiary profits, losses, and dividends were taken up currently through the Investment account. The elimination (D) of Company P's interest in the surplus of Company S on December 31, 1934, can therefore be made as in the second illustration. (See page 337.)

Working papers for fourth illustration.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Working Papers
Year Ended December 31, 1934

	Company *P*	Company *S*	Adjustments and Eliminations — Debit	Adjustments and Eliminations — Credit	Minority	Consolidated
(Cost of Goods Sold Section—same as in first illustration)						
PROFIT AND LOSS						
Sales	125,000 00	100,000 00	25,000 00(A)			200,000 00
Less Cost of Goods Sold (Brought forward)	98,000 00	79,000 00		25,000 00		152,000 00
Gross Profit on Sales	27,000 00	21,000 00				48,000 00
Less Expenses	15 000.00	11,000 00				26,000 00
Net Profit	12,000 00	10,000 00				22,000 00
Dividend from Company *S*	2,700 00		2,700 00(C)			
Company *S* Profit—90%			9,000 00(D)	9,000 00(C)		
Net Profit before Deduction of Minority Interest	14,700 00	10,000 00				22,000 00
Minority Interest—10%					1,000 00	1,000 00
Net Income (Forward)	14,700 00	10,000 00	36,700 00	34,000 00	1,000 00	21,000 00
SURPLUS						
Surplus, December 31, 1933						
Company *P*	34,500 00			4,500 00(C)		39,000 00
Company *S*		15,000 00	13,500 00(D)		1,500 00	
Net Income (Brought forward)	14,700 00	10,000 00	36,700 00	34,000 00	1,000 00	21,000 00
Total	49,200 00	25,000 00			2 500 00	60,000 00
Less Dividends Paid						
Company *P*	6,000 00					6,000 00
Company *S*		3,000 00		2,700 00(D)	300 00	
Surplus, December 31, 1934 (Forward)	43,200 00	22,000 00	50,200 00	41,200 00	2,200 00	54,000 00

Assets						
Cash	31,700 00	26,000 00				57,700 00
Accounts Receivable	50,000 00	40,000 00				90,000 00
Inventory	27,000 00	16,000 00				43,000 00
Investment in Stock of Company S—90%—At Cost	57,000 00					
Add 90% of Increase in Company S Surplus			10,800.00(C)			
Eliminate:						
Capital Stock				45,000 00(B)		
Surplus				19,800 00(D)		
Goodwill						3,000 00
	165,700 00	82,000 00				193,700 00
Liabilities and Net Worth						
Accounts Payable	22,500 00	10,000 00				32,500 00
Capital Stock						
Company P	100,000 00					100,000 00
Company S		50,000 00	45,000 00(B)		5,000 00	
Surplus (Brought forward)	43,200 00	22,000 00	50,200 00	41,200 00	2,200 00	54,000 00
Total Minority Interest					7,200 00	7,200 00
	165,700 00	82,000 00	106,000 00	106,000 00		193,700 00

Summary and Comparison of the Four Illustrations

The adjustments and eliminations in the four preceding illustrations are compared below:

	Subsidiary Profits, Losses, and Dividends Taken Up				Investment Carried at Cost			
	Illustration 1 (No dividends)		Illustration 2 (Dividends)		Illustration 3 (No dividends)		Illustration 4 (Dividends)	
(A) Intercompany Sales:								
Sales	25,000		25,000		25,000		25,000	
Purchases		25,000		25,000		25,000		25,000
(B) Par of Stock Owned								
Capital Stock—Co S	45,000		45 000		45,000		45,000	
Investment in Co S		45,000		45,000		45,000		45,000
(C) Increase in Subsidiary Surplus since Acquisition								
Investment in Co S					13,500		10,800	
Dividend from Co S							2,700	
Surplus—Co P						4,500		4,500
Company S Profit						9,000		9,000
(D) Elimination of Subsidiary Surplus at End of Year								
Surplus—Co S	13,500		13,500		13,500		13,500	
Company S Profit	9,000		9,000		9,000		9,000	
Dividends Paid				2,700				2,700
Investment in Co. S		22,500		19,800		22,500		19,800

Working Papers from Trial Balances

In all of the foregoing illustrations, it was assumed that the accountant was furnished with statements of the several companies, which he copied into the Company columns of the working papers. If trial balances are furnished instead of statements, the working papers may be prepared in the manner illustrated, but the accountant will be obliged to construct the individual company statements in the working papers.

Company Adjustments

In the four preceding illustrations, the statements of the individual companies were assumed to be correct, and the only adjustments required were those necessitated by the inter-company relationships. But the company statements may themselves require adjustments for the correction of omissions or other errors.

To illustrate, let us refer to the working papers for the first illustration, on page 334, and assume that adjustments are required for accrued wages in the amount of $1,000.00 for Company *P* and $2,000.00 for Company *S*. Two methods are available for dealing with such adjustments

First method of dealing with company adjustments.— In the working papers on pages 348 and 349, the unadjusted statements of the two companies were entered in the Company columns, and adjustments and eliminations were made thus:

(1) Accrued wages (Company *P*, $1,000 00; Company *S*, $2,000 00) were debited to Expenses and credited to Accrued Wages in total.

(2) Company *P* took up 90% of the incorrect profits ($10,000 00) of the subsidiary, the adjustment for accrued wages decreases the profits of the subsidiary $2,000 00, the parent company's accounts are adjusted for 90% of this amount ($1,800.00) by an entry debiting Company *S* Profit and crediting Investment in Stock of Company *S*

The remaining adjustments are the same as in the first illustration, except that they are modified by the reduction in the subsidiary profit, these adjustments are:

(A) Elimination of intercompany sales and purchases.

COMPANY *P* AND SUBSIDIARY *S*
Consolidated Working Papers
Year Ended December 31, 1934

	Company *P*	Company *S*	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority	Consolidated
(Cost of Goods Sold Section—same as in first illustration)						
Profit and Loss						
Sales	125,000 00	100,000 00	25,000 00(A)			200 000 00
Less Cost of Sales (Brought forward)	98,000 00	79,000 00		25,000 00		152,000 00
Gross Profit on Sales	27,000 00	21,000 00				48,000 00
Less Expenses	15,000 00	11,000 00	3,000 00(1)			29,000 00
Net Profit	12,000 00	10,000 00				19,000 00
Company *S* Profit—90%	9,000 00		1,800 00(2) 7,200 00(D)			
Total	21,000 00	10,000 00				19,000 00
Minority Interest—10% of Adjusted Profit (See Note)					800 00	800 00
Net Income (Forward)	21,000 00	10,000 00	37,000 00	25,000 00	800 00	18,200 00
Note						
Net Income per Books		10,000 00				
Accrued Wages		2,000 00				
Adjusted Net Income		8 000 00				
Minority Interest—10%		800 00				
Surplus						
Surplus—December 31, 1933						
Company *P*	39 000 00					39,000 00
Company *S*		15,000 00	13,500 00(D)		1,500 00	
Net Income (Brought forward)	21,000 00	10,000 00	37,000 00	25,000 00	800 00	18,200 00
Surplus—December 31, 1934	60,000 00	25,000 00	50,500 00	25,000 00	2,300 00	57,200 00

Assets						
Cash	35,000 00	29,000 00				64,000 00
Accounts Receivable	50,000 00	40,000 00				90,000 00
Inventory	27,000 00	16,000 00				43,000 00
Investment in Stock of Company *S*—90%	70,500 00			1,800 00(2)		
Eliminate						
Capital Stock				45,000 00(B)		
Surplus				20,700 00(D)		
Goodwill						3,000 00
	182 500 00	85,000 00				200,000 00
Liabilities and Net Worth						
Accounts Payable	22,500 00	10,000 00				32,500 00
Accrued Wages				3,000 00(1)		3,000 00
Capital Stock						
Company *P*	100,000 00					100,000 00
Company *S*		50,000 00	45,000 00(B)		5,000 00	
Surplus (Brought forward)	60,000 00	25,000 00	50,500 00	25,000 00	2,300 00	57,200 00
Total Minority Interest					7,300 00	7,300 00
	182,500 00	85,000 00	95,500 00	95,500 00		200,000 00

(B) Elimination of par value of stock held by parent company.

(C) Not required because investment is not carried at cost.

(D) Elimination of parent company's percentage of subsidiary surplus.

Numbers are used for the first two adjustments in the preceding working papers merely to emphasize the new features of this illustration.

Special attention is directed to one point in the working papers: In the Profit and Loss section of the papers, the 10% minority interest is computed, not on the \$10,000.00 net profit of the subsidiary as shown by the Company *S* column, but on the adjusted net profit as shown in the note immediately following the Profit and Loss section.

Second method of dealing with company adjustments.—In the working papers on page 351, (based on the same facts as those in the working papers on pages 348 and 349), the company statements were adjusted before they were entered. Adjustments 1 and 2 do not appear in the papers because effect has been given to them in the company statements. Thus, (1) the expenses and the liabilities have been increased by the amounts of the accrued expenses, totaling \$3,000.00; and (2) the Company *S* Profit account and the Investment account have been reduced by 90% of the \$2,000.00 decrease in the net profit of the subsidiary. Eliminations A, B, and D are the same as in the preceding illustration.

By this method the working papers show correct statements for each company as well as correct consolidated statements.

Stock Purchases During the Period

A slight complication arises if the stock of a subsidiary was purchased during the period for which the consolidated statements are being prepared. To illustrate, assume that Company *S* had capital stock of \$100,000.00 and surplus of \$50,000.00 on January 1, 1933. Company *P* purchased 90% of the stock on April 1, 1933, for \$140,000.00. Company *S* made a profit of \$20,000.00 during 1933, in equal quarterly

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Working Papers—Year Ended December 31, 1934

	Company P	Company S	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority	Consolidated
(Cost of Goods Sold Section—same as in first illustration)						
PROFIT AND LOSS						
Sales	125,000 00	100,000 00	25,000 00(A)			200,000 00
Less Cost of Sales (Brought forward)	98,000 00	79,000 00		25,000 00		152,000 00
Gross Profit on Sales	27,000 00	21,000.00				48,000 00
Less Expenses	16,000 00	13,000 00				29,000 00
Net Profit	11,000 00	8,000 00				19,000 00
Company *S* Profit—90 %	7,200 00		7,200 00(D)			
Total	18,200 00	8,000 00				19,000 00
Minority Interest—10 % of $8,000 00					800 00	800 00
Net Income (Forward)	18,200 00	8,000 00	32,200 00	25,000 00	800 00	18 200 00
SURPLUS						
Surplus—December 31, 1933						
Company *P*	39,000 00					39,000 00
Company *S*		15,000 00	13,500 00(D)		1,500 00	
Net Income (Brought forward)	18,200 00	8,000 00	32,200 00	25,000.00	800 00	18,200 00
Surplus—December 31, 1934	57,200 00	23,000 00	45,700 00	25,000 00	2,300 00	57,200 00
ASSETS						
Cash	35,000 00	29,000 00				64 000 00
Accounts Receivable	50,000 00	40,000 00				90,000 00
Inventory	27,000 00	16,000 00				43,000 00
Investment in Stock of Co *S*—90 %	68,700 00					
Eliminate						
Capital Stock				45,000 00(B)		
Surplus				20,700 00(D)		
Goodwill						3,000 00
	180 700 00	85,000 00				200 000 00
LIABILITIES AND NET WORTH						
Accounts Payable	22,500 00	10,000 00				32,500 00
Accrued Wages	1,000 00	2,000 00				3,000 00
Capital Stock						
Company *P*	100,000 00					100,000 00
Company *S*		50,000 00	45,000 00(B)		5,000 00	
Surplus (Brought forward)	57,200 00	23,000 00	45,700 00	25,000 00	2,300 00	57,200 00
Total Minority Interest					7,300 00	7,300 00
	180 700 00	85,000 00	90,700 00	90,700.00		200 000 00

amounts of $5,000.00. Company P took up its 90% of the $15,000.00 profit earned during the three quarters of the year subsequent to acquisition.

The profits of the subsidiary for 1933 accruing to the parent company and properly included in the consolidated net income for the year were:

Total profit of Company S		$20,000
Deduct. Minority interest—10% of $20,000 00	$2,000	
Profit applicable to the 90% interest of Company P, but earned prior to acquisition—90% of $5,000 00	4,500	6,500
Remainder—or 90% of the $15,000.00 earned after Apr. 1, 1933		$13,500

The student should note, in the working papers on page 353, the method of deducting these two items ($2,000.00 and $4,500.00) to determine the consolidated net income

Elimination D in the working papers on page 353 is similar in nature to the D eliminations in the preceding illustrations, except for the additional item of $4,500.00. The entire elimination entry is:

	Section	Debit	Credit
Subsidiary profit earned during last 9 months of 1933, taken up by parent company—90% of $15,000.00	P & L	$13,500 00	
Subsidiary profit earned in 1933 on parent company's portion of stock, prior to acquisition—90% of $5,000 00 profit for first ¼ of year	P & L.	4,500 00	
Subsidiary surplus on December 31, 1932—90% of $50,000.00	Surplus	45 000 00	
Total eliminated from Investment account —90% of subsidiary surplus on December 31, 1933	Assets		$63,000 00

Dividends paid by the parent company decrease the consolidated surplus, and should be extended to the Consolidated column of the working papers. Dividends paid by the subsidiary do not affect the consolidated surplus; therefore the total dividends paid by the subsidiary should be entered in the Elimination and Minority columns, so that nothing will remain to be extended to the Consolidated column.

To illustrate, assume that the parent company, in addition to acquiring 90% of the subsidiary stock on April 1, also purchased 5% of the stock on October 1. Assume also that

COMPANY *P* AND SUBSIDIARY *S*

Consolidated Working Papers—Year Ended December 31, 1933

(*Cost of Goods Sold Section Omitted*)

	Company *P*	Company *S*	Adjustments and Eliminations — Debit	Adjustments and Eliminations — Credit	Minority	Consolidated
Profit and Los						
Sales	500,000	300,000	25,000(A)			775,000
Less Cost of Goods Sold (Brought forward)	400,000	200,000		25,000		575,000
Gross Profit on Sales	100,000	100,000				200,000
Less Expenses	75,000	80,000				155,000
Net Profit	25,000	20,000				45,000
Company *S* Profit—90 % for ¾ of a year	13,500		13,500(D)			
Net Profit Before Deduction of Minority Interest and Profits Earned Prior to Acquisition.	38,500	20,000				45,000
Deductions						
Minority Interest—10 % of $20,000					2,000	2,000
Subsidiary Profits Applicable to Stock Owned by Parent Company, but Earned Prior to Date of Acquisition—90 % of ¼ of $20,000			4,500(D)			4,500
Total Deductions						6,500
Net Income (Forward)	38,500	20,000	43,000	25,000	2,000	38,500
Surplus						
Surplus, December 31, 1932						
Company *P*	100,000					100,000
Company *S*		50,000	45,000(D)		5,000	
Net Income (Brought forward)	38,500	20,000	43,000	25,000	2,000	38,500
Surplus, December 31, 1933	138,500	70,000	88,000	25,000	7,000	138,500
Assets						
Sundry Assets	295,000	210,000				505,000
Investment in Stock of Company *S*—90 %	153,500					
Eliminate.						
Capital Stock				90,000(B)		
Surplus				63,000(D)		
Goodwill						500
	448,500	210,000				505 500
Liabilities and Net Worth						
Sundry Liabilities	60,000	40,000				100,000
Capital Stock						
Company *P*	250,000					250,000
Company *S*		100,000	90,000(B)		10,000	
Surplus (Brought forward)	138,500	70,000	88,000	25,000	7,000	138,500
Total Minority Interest					17,000	17,000
	448,500	210,000	178,000	178,000		505 500

the subsidiary paid a $5,000.00 dividend on July 1, this dividend reduced the subsidiary surplus at the end of the year from $70,000.00 to $65,000.00. The elimination D in the working papers on page 353 would be:

		Section	Debit	Credit
Subsidiary profit earned				
Last 9 months—90% of ¾ of $20,000 00	$13,500			
Last 3 months—5% of ¼ of $20,000 00	250	P & L.	$13,750	
Subsidiary profit prior to acquisition				
95% of $20,000 00 .	$19,000			
Less . .	13,750	P & L	5,250	
Subsidiary surplus—December 31, 1932—				
95% of $50,000 00 .		Surplus	47,500	
Dividend of subsidiary—95% of $5,000 00		Surplus		$ 4,750
Net elimination from Investment account				
—95% of $65,000 00 subsidiary surplus		Assets		61,750

CHAPTER 50

CONSOLIDATED BALANCE SHEET, SURPLUS STATEMENT, PROFIT AND LOSS STATEMENT, AND SUPPORTING STATEMENTS (Concluded)

Outline of illustrations.—This chapter, like the preceding one, contains four principal illustrations requiring consolidated statements for the year 1934 The illustrations in this chapter are somewhat more complex than those in the preceding chapter, because:

There are two subsidiaries. Company *A*, the parent company, owns:
- 90% of the stock of Company *B*, which it acquired on January 1, 1930, the surplus of Company *B* on that date was $15,000.00.
- 80% of the stock of Company *C*, which it acquired on January 1, 1934; the surplus of Company *C* on that date was $20,000.00.

Numerous additional adjustments and eliminations of intercompany operating transactions are illustrated.

As in the preceding chapter, the four illustrations differ as follows:

First and second illustrations. The parent company has taken up its share of subsidiary profits, losses, and dividends through the Investment accounts:
- First illustration: No dividends were paid during 1934.
- Second illustration: Dividends were paid during 1934.

Third and fourth illustrations· The parent company is carrying the investments at cost:
- Third illustration. No dividends were paid during 1934.
- Fourth illustration· Dividends were paid during 1934

First and second illustrations.—In the first two illustrations it is assumed that the parent company has taken up its share of subsidiary profits, losses, and dividends through

the Investment accounts. The two illustrations differ only in the matter of dividends during 1934, the year for which the statements are being prepared.

First illustration.—The working papers for this illustration appear on pages 360 and 361. Following is an explanation of the eliminations and adjustments appearing therein: Entries A to F will be the same in all four illustrations; entries G to L will vary.

Elimination A: *Intercompany sales.*—Companies *A* and *B* manufacture, Company *A* sells to outsiders only; Company *B* sells to Company *A* and to outsiders. Company *C* does not manufacture, but deals only in raw materials, selling to outsiders and to Companies *A* and *B*. The intercompany sales during 1934 were as follows:

By	To	Amount
Company *C*	Company *B*	\$ 60,000 00
Company *C*	Company *A*	35,000 00
Company *B*	Company *A*	75,000 00
Total		\$170,000 00

These intercompany transactions were recorded in the regular Sales and Purchases accounts, and must be eliminated Note elimination A in the cost of goods sold papers, crediting Purchases \$170,000 00, and the offsetting elimination in the profit and loss papers, debiting Sales

Elimination B: *Intercompany receivables and payables*—The following intercompany balances are included in the accounts receivable and accounts payable in the balance sheet papers:

Owed to Company *B*	
By Company *A*	\$ 5,000 00
Owed to Company *C*	
By Company *A*	2,900 00
By Company *B*	3,600 00
Total	\$11,500 00

The \$11,500 00 total of intercompany balances is eliminated from the accounts receivable and accounts payable in the balance sheet papers.

Adjustment C: *Intercompany profit in opening inventories*—The inventories on December 31, 1933 (the end of the preceding year) contained profits made on intercompany sales, as follows:

	Profit Made by	
	Company *B*	Company *C*
On goods in Company *A*'s inventory		
Raw materials	$2,000 00	$1,000 00
Goods in process	1,500 00	800 00
On goods in Company *B*'s inventory.		
Raw materials		500 00
Goods in process		800 00
Finished goods		250 00

Company *A* owned 90% of the stock of Company *B* on December 31, 1933, when it prepared its consolidated statements as of that date, it eliminated 90%, or $3,150.00, of the $3,500 00 profit made by Company *B* because this $3,150 00 was an intercompany profit not to be included in the consolidated net income until the goods were sold to outsiders This intercompany profit is detailed as follows:

On raw materials—90% of $2,000 00	$1,800 00
On goods in process—90% of $1,500 00	1,350 00
Total	$3,150 00

The adjustment for this intercompany profit, made in the working papers as of December 31, 1933, reduced by $3,150 00 the inventory valuation and the consolidated surplus as of that date To be consistent, the same adjustment must be made in the December 31, 1934 working papers, reducing the opening inventory and the opening surplus by $3,150.00, therefore, note:

In the surplus papers. The $3,150.00 debit to Company *A*'s Surplus as of the beginning of 1934.

In the cost of goods sold papers: The offsetting credits reducing the opening inventories—a credit of $1,800 00 to the raw materials inventory, and a credit of $1,350.00 to the goods in process inventory

Company *A* did not buy the stock of Company *C* until January 1, 1934, the profit made by Company *C* on sales of goods to Companies *A* and *B* prior to that date was not intercompany profit, because no intercompany relationship existed when the sales were made. The profit in the December 31, 1933 inventories of goods acquired from Company *C* may therefore be ignored

Adjustment D· *Intercompany profit in closing inventories.*—The inventories on December 31, 1934 contained intercompany profits as follows:

	Profit Made by Company B	Profit Made by Company C
On goods in Company A's inventory:		
Raw materials	$2,500 00	$1,200 00
Goods in process	800 00	200 00
Finished goods	1,800 00	1,500 00
On goods in Company B's inventory		
Raw materials		500 00
Goods in process		1,000 00
Finished goods		1,300 00
Total	$5,100 00	$5,700 00
Per cent of subsidiary stock owned by Co A	90%	80%
Deductions to be made for intercompany profit	$4,590 00	$4,560 00

The total deduction is thus found to be $9,150 00, but separate deductions must be made from raw materials, goods in process, and finished goods. The amounts of these deductions are determined as follows:

	In Inventory of	Sold By	Per Cent of Selling Company's Stock Owned by Company A	Total Profit	Deduction
Raw Materials:	Company A	Company B	90%	$2,500	$2,250
	Company A	Company C	80%	1,200	960
	Company B	Company C	80%	500	400
	Total				$3,610
Goods in Process:	Company A	Company B	90%	800	$ 720
	Company A	Company C	80%	200	160
	Company B	Company C	80%	1,000	800
	Total				$1,680
Finished Goods	Company A	Company B	90%	1,800	$1,620
	Company A	Company C	80%	1,500	1,200
	Company B	Company C	80%	1,300	1,040
	Total				$3,860
Total					$9,150

The adjustments for the above amounts of intercompany profits are made in the working papers as follows:

In the cost of goods sold papers. By debits against the December 31, 1934 inventories, which appear in this section as credits.

In the balance sheet papers: By credits against the inventories, which appear in this section as debits.

Elimination E: *Intercompany rent.*—Company *A* leases certain equipment to Company *B* at an annual rent of $3,000.00.

The amount of this intercompany rent is eliminated as follows:

In the cost of goods sold papers. The \$3,000.00 (which is included in the manufacturing expenses of Company *B*) is eliminated by a credit.

In the profit and loss papers· The \$3,000.00 (shown as miscellaneous income in the profit and loss statement of Company *A*) is eliminated by a debit.

Elimination F: *Bond interest* —Company *C* has an issue of \$50,000 00 of 5% bonds, of which Company *A* owns \$40,000 00. The collection of \$2,000 00 of bond interest by Company *A* is an intercompany transaction, which is eliminated in the profit and loss papers as follows:

From Company *A*'s miscellaneous income by a debit.
From Company *C*'s bond interest expense by a credit.

Elimination G: *Company* A*'s interest in stock of Company* B.—Company *B* has \$100,000 00 of capital stock, of which Company *A* owns 90%, or \$90,000 00. This intercompany stockholding is eliminated in the balance sheet papers as follows:

From Company *A*'s Investment account by a credit.
From Company *B*'s Capital Stock account by a debit.

Adjustment H: *Increase in surplus of Company* B *since acquisition.*—This adjustment (like the C adjustments in the preceding chapter) is not required in the first and second illustrations, because the parent company has already taken up its share of the subsidiary's income since acquisition The adjustment is required in the third and fourth illustrations, in which the investments are carried at cost

Elimination I. *Company* A*'s interest in surplus of Company* B — The parent company's interest in the subsidiary's surplus at the date of the balance sheet is eliminated from the Investment account by a credit, in the customary manner. If only a consolidated balance sheet were to be prepared, the offsetting debit elimination would be made from the subsidiary surplus in the balance sheet papers. But since consolidated surplus and consolidated profit and loss statements are to be prepared, the debit must be apportioned between the surplus at the beginning of the period (in the surplus papers) and the changes during the period (in the profit and loss papers).

These elements of Company *B*'s surplus, and of Company *A*'s 90% interest therein, are detailed on page 362.

Working papers for first illustration.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Working Papers
Year Ended December 31, 1934

	Company *A*	Company *B*	Company *C*	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority Interests	Consolidated
Cost of Goods Sold							
Materials							
Inventory, December 31, 1933	40,000	15,000	15,000		1,800(C)		68,200
Purchases	145,000	95,000	76,000		170,000(A)		146,000
Total	185,000	110,000	91,000				214,200
Less Inventory, December 31, 1934	50,000	25,000	11,000	3,610(D)			82,390
Materials Used	135,000	85,000	80,000				131,810
Direct Labor	85,000	65,000					150,000
Manufacturing Expense	70,000	40,000			3,000(E)		107,000
Total	290,000	190,000	80,000				388,810
Add Goods in Process, December 31, 1933	25,000	30,000			1,350(C)		53,650
Total	315,000	220,000	80,000				442,460
Deduct Goods in Process, December 31, 1934	55,000	25,000		1,680(D)			78,320
Cost of Goods Manufactured	260,000	195,000	80,000				364,140
Add Inventory of Finished Goods, December 31, 1933		30,000					30,000
Total	260,000	225,000	80,000				394,140
Deduct Inventory of Finished Goods, December 31, 1934	45,000	50,000		3,860(D)			91,140
Cost of Goods Sold (Forward)	215,000	175,000	80,000	9,150	176,150		303,000
Profit and Loss							
Gross Sales	300,000	225,000	120,000	170,000(A)			475,000
Less Returned Sales and Allowances	3,000	2,000	1,000				6,000
Net Sales	297,000	223,000	119,000				469,000
Less Cost of Goods Sold (Brought forward)	215,000	175,000	80,000	9,150	176,150		303,000
Gross Profit on Sales	82,000	48,000	39,000				166,000
Less Selling Expenses	23,000	22,000	15,000				60,000
Net Profit on Sales	59,000	26,000	24,000				106,000
Less General Expenses	24,000	9,000	3,000				36,000
Net Profit on Operations	35,000	17,000	21,000				70,000
Add Miscellaneous Income:							
Company *B* Profit—90%	15,300			15,300(I)			
Company *C* Profit—80%	14,800			14,800(L)			
Rent of Equipment to Company *B*	3,000			3,000(E)			
Bond Interest from Company *C*	2,000			2,000(F)			
Net Profit on Operations and Other Income	70,100	17,000	21,000				70,000
Less Bond Interest Paid	6,000		2,500		2,000(F)		6,500
Net Income before Deduction of Minority Interests	64,100	17,000	18,500				63 500

Minority Interests							
Company B—10 %						1,700	5,400
Company C—20 %						3,700	
Net Income (Forward)	64,100	17,000	18,500	214,250	178,150	5,400	58,100
SURPLUS							
Surplus, December 31, 1933							
Company A	35,000						
Intercompany Profit in Inventories, December 31, 1933				3,150(C)			
Adjusted Balance							31,850
Company B		25,000		22,500(I)		2,500	
Company C			20,000	16,000(L)		4,000	
Net Income (Brought forward)	64,100	17,000	18,500	214,250	178,150	5,400	58,100
Surplus, December 31, 1934	99,100	42,000	38,500	255,900	178,150	11,900	89,950
ASSETS							
Cash	40,000	16,000	16,500				72,500
Accounts Receivable.	53,700	17,000	25,000		11,500(B)		84,200
Inventories							
Raw Materials	50,000	25,000	11,000		3,610(D)		82,390
Goods in Process	55,000	25,000			1,680(D)		78,320
Finished Goods	45,000	50,000			3,860(D)		91,140
Land	50,000	20,000	25,000				95,000
Buildings—Less Depreciation	140,000	35,000	60,000				235,000
Equipment—Less Depreciation	90,000	40,000	15,000				145,000
Investment in Stock of Company B—90 %	132,800						
Eliminate							
Capital Stock					90,000(G)		
Surplus					37,800(I)		
Goodwill							5,000G
Investment in Stock of Company C—80 %	80,800						
Eliminate							
Capital Stock					40,000(J)		
Surplus					30,800(L)		
Goodwill							10,000G
Investment in Bonds of Company C	40,000						40,000
	777 300	228,000	152,500				938,550
LIABILITIES AND NET WORTH							
Accounts Payable	78,200	86,000	14,000	11,500(B)			166,700
Bonds Payable							
Company A	100,000						100,000
Company C			50,000				50,000
Capital Stock							
Company A	500,000						500,000
Company B		100,000		90,000(G)		10,000	
Company C			50,000	40,000(J)		10,000	
Surplus (Brought forward)	99,100	42,000	38,500	255,900	178,150	11,900	89,950
Total Minority Interest						31,900	31,900
	777,300	228,000	152,500	397,400	397,400		938,550

	Company *B* Surplus	
	Total	Company *A*'s 90%
Surplus, December 31, 1933	$25,000 00	$22,500 00
Net Profit, 1934	17,000 00	15,300 00
Surplus, December 31, 1934	$42,000 00	$37,800 00

The elimination of Company *A*'s 90% interest is made as follows.

	Section	Debit	Credit
Surplus of Co *B*—as of December 31, 1933	Surplus	$22,500	
Co *B* Profit (taken up by Co *A*)	P & L	15,300	
Investment in Company *B*	Assets		$37,800

Elimination J: *Company* A*'s interest in stock of Company* C — Company *C* has $50,000 00 of capital stock, of which Company *A* owns 80%, or $40,000 00. This intercompany stockholding is eliminated in the balance sheet papers as follows:

From Company *A*'s Investment account by a credit
From Company *C*'s Capital Stock account by a debit.

Adjustment K. *Increase in surplus of Company* C *since acquisition* This adjustment is not required in the first and second illustrations, because the parent company has taken up its share of the subsidiary's income since acquisition. It is required in the third and fourth illustrations, in which the investments are carried at cost.

Elimination L: *Company* A*'s interest in surplus of Company* C — The amount of the credit elimination from Company *A*'s Investment in Company *C*, as representing Company *A*'s 80% interest in the surplus of Company *C*, and the amounts of the offsetting debits to Surplus and current profits, are determined as follows.

	Company *C* Surplus	
	Total	Company *A*'s 80%
Surplus, January 1, 1934	$20,000 00	$16,000 00
Net Profit, 1934	18,500 00	14,800 00
Surplus, December 31, 1934	$38,500 00	$30,800 00

The elimination is made as follows·

	Section	Debit	Credit
Surplus of Co. *C*—as of December 31, 1933	Surplus	$16,000	
Co *C* Profit (taken up by Co *A*)	P & L.	14,800	
Investment in Company *C*	Assets		$30,800

Consolidated statements: First illustration.—Following are the consolidated statements prepared from the foregoing working papers.

COMPANY *A* AND SUBSIDIARIES *B* AND *C* Exhibit D

Consolidated Statement of Cost of Goods Sold

For the Year Ended December 31, 1934

Materials:	
Inventory, December 31, 1933	\$ 68,200 00
Purchases	146,000 00
Total	\$214,200 00
Less Inventory, December 31, 1934	82,390 00
Cost of Materials Used or Sold	\$131,810 00
Direct Labor	150,000 00
Manufacturing Expense	107,000 00
Total	\$388,810 00
Add Goods in Process, December 31, 1933	53,650 00
Total	\$442,460.00
Deduct Goods in Process, December 31, 1934	78,320 00
Cost of Goods Manufactured, and Materials Sold	\$364,140 00
Add Finished Goods, December 31, 1933	30,000 00
Total	\$394,140 00
Deduct Finished Goods, December 31, 1934	91,140 00
Cost of Goods Sold	\$303,000 00

COMPANY *A* AND SUBSIDIARIES *B* AND *C* Exhibit C

Consolidated Profit and Loss Statement

For the Year Ended December 31, 1934

Gross Sales	\$475,000 00
Less Returned Sales and Allowances	6,000 00
Net Sales	\$469,000 00
Less Cost of Goods Sold (Exhibit D)	303,000 00
Gross Profit on Sales	\$166,000 00
Less Selling Expenses	60,000 00
Net Profit on Sales	\$106,000 00
Less General Expenses	36,000 00
Net Profit on Operations	\$ 70,000 00
Less Bond Interest Paid	6.500 00
Net Income	\$ 63,500 00
Less Minority Interests in Net Income	5,400 00
Parent Company's Portion of Consolidated Net Income	\$ 58,100 00

COMPANY *A* AND SUBSIDIARIES *B* AND *C* Exhibit B

Consolidated Surplus Statement

For the Year Ended December 31, 1934

Surplus, December 31, 1933	\$31,850 00
Net Income for 1934	58,100 00
Surplus, December 31, 1934	\$89,950 00

COMPANY *A* AND SUBSIDIARIES *B* AND *C* Exhibit A

Consolidated Balance Sheet

December 31, 1934

Assets			
Current Assets:			
Cash		$ 72,500 00	
Accounts Receivable		84,200 00	
Inventories			
Raw Materials	$82,390 00		
Goods in Process	78,320 00		
Finished Goods	91,140 00	251,850 00	
Total Current Assets			$408,550 00
Fixed Assets:			
Land		$ 95,000 00	
Buildings—Less Depreciation		235,000 00	
Machinery—Less Depreciation		145,000 00	
Total Fixed Assets			475,000 00
Goodwill			15,000 00
			$898,550 00
Liabilities and Net Worth			
Current Liabilities:			
Accounts Payable			$166,700 00
Fixed Liabilities:			
Bonds Payable—6%		$100,000 00	
Bonds Payable—5%	$50,000 00		
Less Bonds in Treasury	40,000 00	10,000 00	
Total Fixed Liabilities			110,000 00
Minority Interests			31,900 00
Net Worth			
Capital Stock		$500,000 00	
Surplus (Exhibit B)		89,950 00	
Total Net Worth			589,950 00
			$898,550 00

Second illustration. (*See working papers, pages* 366 *and* 367.)—This illustration is the same as the preceding one, with one exception: Dividends were paid by all companies during the year 1934. The dividend payments by the subsidiaries reduced their surplus balances at the end of the year; consequently, eliminations I and L, eliminating the parent company's interests in the surpluses of the subsidiaries, differ from the corresponding eliminations in the preceding illustration.

Elimination I. *Company* A*'s interest in surplus of Company* B — The elements of Company *B*'s surplus at the end of 1934, and Company *A*'s 90% interest therein, are detailed in the following summary:

	Company B Surplus	
	Total	Company A's 90%
Surplus, December 31, 1933	\$25,000 00	\$22,500 00
Add Net Profit, 1934	17,000 00	15,300 00
Deduct Dividends Paid, 1934	6,000 00*	5,400 00*
Surplus, December 31, 1934.	\$36,000 00	\$32,400 00

* Deductions

The elimination of Company A's 90% interest is made by the following entry:

	Section	Debit	Credit
Surplus of Co B—as of December 31, 1933	Surplus	\$22,500	
Company B Profit (taken up by Company A)	P & L	15,300	
Dividends Paid	Surplus		\$ 5,400
Investment in Company B	Assets		32,400

The student should trace these entries to the working papers on page 366 and should compare them with elimination I in the first illustration, on page 360.

Elimination L. *Company* A's *interest in surplus of Company* C.—The amount of the credit elimination from Company A's Investment in Company C, as representing Company A's 80% interest in the surplus of Company C, and the amounts of the offsetting entries, are determined as follows:

	Company C Surplus	
	Total	Company A's 80%
Surplus, January 1, 1934	\$20,000 00	\$16,000 00
Add Net Profit, 1934	18,500 00	14,800 00
Deduct Dividends Paid, 1934	3,000 00*	2,400 00*
Surplus, December 31, 1934	\$35,500.00	\$28,400 00

* Deductions

The elimination of Company A's 80% interest is made by the following entry.

	Section	Debit	Credit
Surplus of Co C—as of December 31, 1933	Surplus	\$16,000	
Company C Profit (taken up by Company A)	P & L	14,800	
Dividends Paid	Surplus		\$ 2,400
Investment in Company C	Assets		28,400

The similar adjustment for the first illustration appears on page 362.

Working papers for second illustration.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Working Papers
Year Ended December 31, 1934

	Company *A*	Company *B*	Company *C*	Adjustments and Eliminations: Debit	Adjustments and Eliminations: Credit	Minority Interests	Consolidated
(Cost of Goods Sold Section—Same as in first illustration.)							
(Profit and Loss Section—Same as in first illustration.)							
SURPLUS							
Surplus, December 31, 1933.							
Company *A*	35,000						
Intercompany Profit in Inventories, Dec 31, 1933				3,150(C)			
Adjusted Balance							31,850
Company *B*		25,000		22,500(I)		2,500	
Company *C*			20,000	16,000(L)		4,000	
Net Income (Brought forward)	64,100	17,000	18,500	214,250	178,150	5,400	58,100
Total	99,100	42,000	38,500			11,900	89,950
Less Dividends Paid.							
Company *A*	30,000						30,000
Company *B*		6,000			5,400(I)	600*	
Company *C*			3,000		2,400(L)	600*	
Surplus, December 31, 1934 (Forward)	69,100	36,000	35,500	255,900	185,950	10,700	59,950
ASSETS							
Cash	17,800	10,000	13,500				41,300
Accounts Receivable	53,700	17,000	25,000		11,500(B)		84,200
Inventories							
Raw Materials	50,000	25,000	11,000		3,610(D)		82,390
Goods in Process	55,000	25,000			1,680(D)		78,320
Finished Goods	45,000	50,000			3,860(D)		91,140
Land	50,000	20,000	25,000				95,000
Buildings—Less Depreciation	140,000	35,000	60,000				235,000

Equipment—Less Depreciation	90,000	40,000	15,000				145,000
Investment in Stock of Company B—90%	127,400						
Eliminate							
Capital Stock					90,000(G)		
Surplus					32,400(I)		
Goodwill							5,000G
Investment in Stock of Company C—80%	78,400						
Eliminate							
Capital Stock					40,000(J)		
Surplus					28,400(L)		
Goodwill							10,000G
Investment in Bonds of Company C	40,000						40,000
	747,300	222,000	149,500				907,350
LIABILITIES AND NET WORTH							
Accounts Payable	78,200	86,000	14,000	11,500(B)			166,700
Bonds Payable							
Company A	100,000						100,000
Company C			50,000				50,000
Capital Stock							
Company A	500,000						500,000
Company B		100,000		90,000(G)		10,000	
Company C			50,000	40,000(J)		10,000	
Surplus (Brought forward)	69,100	36,000	35,500	255,900	185,950	10,700	59,950
Total Minority Interest						30,700	30,700
	747,300	222,000	149,500	397,400	397,400		907,350

Consolidated statements: Second illustration.—The statement of cost of goods sold and the statement of profit and loss would be the same as those in the first illustration.

COMPANY *A* AND SUBSIDIARIES *B* AND *C* Exhibit B

Consolidated Surplus Statement

For the Year Ended December 31, 1934

Surplus, December 31, 1933	$31,850 00
Net Income for 1934	58,100 00
Total	$89,950 00
Less Dividends Paid	30,000 00
Surplus, December 31, 1934	$59,950 00

The payments of dividends affect the following items in the consolidated balance sheet: cash, minority interest, and consolidated surplus.

COMPANY *A* AND SUBSIDIARIES *B* AND *C* Exhibit A

Consolidated Balance Sheet

December 31, 1934

Assets

Current Assets			
Cash		$ 41,300 00	
Accounts Receivable		84,200 00	
Inventories			
Raw Materials	$82,390 00		
Goods in Process	78,320 00		
Finished Goods	91,140 00	251,850 00	
Total Current Assets			$377,350 00
Fixed Assets			
Land		$ 95,000 00	
Buildings—Less Depreciation		235,000 00	
Machinery—Less Depreciation		145,000 00	
Total Fixed Assets			475,000 00
Goodwill			15,000 00
			$867,350 00

Liabilities and Net Worth

Current Liabilities			
Accounts Payable			$166,700 00
Fixed Liabilities			
Bonds Payable—6%		$100,000 00	
Bonds Payable—5%	$50,000 00		
Less Bonds in Treasury	40,000 00	10,000 00	
Total Fixed Liabilities			110,000 00
Minority Interest			30,700 00
Net Worth:			
Capital Stock		$500,000 00	
Surplus		59,950 00	
Total Net Worth			559,950 00
			$867,350 00

Third and fourth illustrations.—In the two following illustrations it is assumed that the parent company has carried the investments at cost. Adjustments are therefore necessary to take up the parent company's share of the increase in the surplus of each subsidiary since acquisition.

Third illustration. (*See working papers, pages* 370 *and* 371.)—This illustration is the same as the first illustration, except that the investments are carried at cost on the parent company's books.

Adjustment H: *Increase in surplus of Company* B *since acquisition.* The increase in the surplus of Company *B* since the date of acquisition, and Company *A*'s 90% interest therein, are determined as follows:

	Company *B* Surplus	
	Total	Company *A*'s 90%
Increase prior to 1934:		
Surplus, December 31, 1933	$25,000 00	
Surplus, January 1, 1930, date of acquisition	15,000 00	
Increase prior to 1934	$10,000 00	$ 9,000 00
Increase during 1934—net income	17,000 00	15,300 00
Total	$27,000 00	$24,300 00

The adjustments in the working papers are as follows:

	Section	Debit	Credit
Investment in Company *B*	Assets	$24,300	
Surplus (Company *A*)	Surplus		$ 9,000
Company *B* Profit (to take up the current year's income)	P & L		15,300

The debit to the Investment account takes up Company *A*'s 90% of the increase in the subsidiary's surplus since the date of acquisition The credit to Surplus takes up, in the surplus of Company *A*, as of December 31, 1933, 90% of the increase in Company *B*'s surplus between the date of acquisition and December 31, 1933 The credit to Company *B* Profit takes up, as income to Company *A*, 90% of *B*'s profit for 1934

In other words, by applying this adjustment in the working papers, Company *A*'s accounts are adjusted to agree with those resulting from taking up subsidiary profits, losses, and dividends currently through the Investment account, as in the first illustration The elimination of Company *A*'s interest in the surplus of Company *B* on December 31, 1934 (elimination I) is therefore made as in the first illustration.

Working papers for third illustration.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*

Consolidated Working Papers—Year Ended December 31, 1934

	Company *A*	Company *B*	Company *C*	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority	Consolidated
(Cost of Goods Sold Section—Same as in first illustration)							
Profit and Loss							
Gross Sales	300,000	225,000	120,000	170,000(A)			475 000
Less Returned Sales and Allowances	3,000	2,000	1,000				6 000
Net Sales	297,000	223,000	119,000				469,000
Less Cost of Goods Sold (Brought forward)	215,000	175,000	80,000	9,150	176,150		303,000
Gross Profit on Sales	82,000	48,000	39,000				166,000
Less Selling Expenses	23,000	22,000	15,000				60 000
Net Profit on Sales	59,000	26,000	24,000				106,000
Less General Expenses	24,000	9,000	3 000				36,000
Net Profit on Operations	35,000	17,000	21,000				70,000
Add Miscellaneous Income							
Company *B* Profit—90%				15,300(I)	15,300(H)		
Company *C* Profit—80%				14,800(L)	14,800(K)		
Rent of Equipment to Company *B*	3,000			3,000(E)			
Bond Interest from Company *C*	2,000			2,000(F)			
Net Profit on Operations and Other Income	40,000	17,000	21,000				70,000
Less Bond Interest Paid	6,000		2,500		2,000(F)		6,500
Net Income before Deduction of Minority Interests	34,000	17,000	18,500				63,500
Minority Interests							
Company *B*—10%						1,700	5,400
Company *C*—20%						3,700	
Net Income (Forward)	34,000	17,000	18,500	214,250	208 250	5,400	58,100
Surplus							
Surplus, December 31, 1933.							
Company *A*	26,000						
Add 90% of Increase in Company *B*'s Surplus from Date of Acquisition to December 31, 1933					9,000(H)		
Intercompany Profit in Inventories, December 31, 1933				3,150(C)			
Adjusted Balance							31,850
Company *B*		25,000		22,500(I)		2,500	
Company *C*			20,000	16,000(L)		4,000	
Net Income (Brought forward)	34,000	17,000	18,500	214,250	208,250	5,400	58,100
Surplus December 31, 1934	60,000	42,000	38,500	255,900	217,250	11,900	89,950

Assets							
Cash	40,000	16,000	16,500				72,500
Accounts Receivable	53,700	17,000	25,000		11,500(B)		84,200
Inventories							
Raw Materials	50,000	25,000	11,000		3,610(D)		82,390
Goods in Process	55,000	25,000			1,680(D)		78,320
Finished Goods	45,000	50,000			3,860(D)		91,140
Land	50,000	20,000	25,000				95,000
Buildings—Less Depreciation	140,000	35,000	60,000				235,000
Equipment—Less Depreciation	90,000	40,000	15,000				145,000
Investment in Stock of Company *B*—90 %—At cost	108,500						
Add 90 % of Increase in Company *B* Surplus since Acquisition				24,300(H)			
Eliminate							
Capital Stock					90,000(G)		
Surplus					37,800(I)		
Goodwill							5,000G
Investment in Stock of Company *C*—80 %—At cost	66,000						
Add 80 % of Increase in Company *C* Surplus since Acquisition				14,800(K)			
Eliminate							
Capital Stock					40,000(J)		
Surplus					30,800(L)		
Goodwill							10,000G
Investment in Bonds of Company *C*	40,000						40,000
	738,200	228,000	152,500				938,550
Liabilities and Net Worth							
Accounts Payable	78,200	86,000	14,000	11,500(B)			166,700
Bonds Payable							
Company *A*	100,000						100,000
Company *C*			50,000				50,000
Capital Stock							
Company *A*	500,000						500,000
Company *B*		100,000		90,000(G)		10,000	
Company *C*			50,000	40,000(J)		10,000	
Surplus (Brought forward)	60,000	42,000	38,500	255,900	217,250	11,900	89,950
Total Minority Interests						31,900	31,900
	738,200	228,000	152,500	436,500	436,500		938,550

Adjustment K: *Increase in surplus of Company* C *since acquisition.* The increase in the surplus of Company C since January 1, 1934, the date of acquisition, and Company A's 80% interest therein, are determined as follows:

	Company C Surplus	
	Total	Company A's 80%
Net Profit, 1934	\$18,500 00	\$14,800 00

The adjustment is made as follows

	Section	Debit	Credit
Investment in Company C	Assets	\$14,800 00	
Company C Profit .	P & L		\$14,800 00

By applying this adjustment to the working papers, Company A's accounts are adjusted to agree with those resulting from taking up the subsidiary profits currently through the Investment account, as in the first illustration. The elimination of Company A's interest in the surplus of Company C on December 31, 1934 (elimination L) is therefore the same in this illustration as in the first illustration.

Consolidated statements: Third illustration.—The consolidated statements which would be prepared from the working papers of this illustration would not differ from those prepared from the working papers of the first illustration. These statements appear on pages 363 and 364

Fourth illustration. (*See working papers, pages* 374 *and* 375.)—In this illustration it is assumed that dividends have been paid by all companies, as in the second illustration.

Investments are carried on the parent company's books at cost, as in the third illustration; adjustments H and K are therefore required, to take up the parent company's interest in the increase in the subsidiary surplus accounts since the date of acquisition.

Adjustments H and K are similar to those made in the third illustration, but a new element is introduced because of the fact that, in the present illustration, all companies are assumed to have paid dividends during the year.

Adjustment H: *Increase in surplus of Company* B *since acquisition.* The increase in the surplus of Company B since the date of acquisition, and Company A's 90% thereof, are determined as follows:

	Company B Surplus	
	Total	Company A's 90%
Increase prior to 1934.		
Surplus, December 31, 1933	$25,000	
Surplus, January 1, 1930, date of acquisition	15,000	
Increase prior to 1934	$10,000	$ 9,000
Changes during 1934		
Net Income	17,000	15,300
Dividends Paid	6,000*	5,400*
Total	$21,000	$18,900

The adjustments in the working papers are as follows:

	Section	Debit	Credit
Investment in Company B	Assets	$18,900 00	
Dividends from Company B	P & L	5,400 00	
Company B Profit	P & L		$15,300 00
Surplus	Surplus		9,000 00

The debit to the Investment account takes up Company *A*'s 90% of the increase in the subsidiary's surplus since the date of acquisition Company *A* has credited Dividends from Company *B* with the $5,400 00 dividend received during the year, and regards this amount as income; the adjusting entry debits this account to eliminate it, and sets up, instead, the $15,300 00 credit representing Company *A*'s percentage of the income earned by the subsidiary during the year. The credit to Surplus takes up, in the surplus of Company *A*, as of December 31, 1933, 90% of the increase in Company *B*'s surplus between the date of acquisition and December 31, 1933.

In other words, by applying this adjustment in the working papers, Company *A*'s accounts are adjusted to agree with those in the second illustration, resulting from taking up subsidiary profits, losses, and dividends currently through the Investment account. The elimination (I) of Company *A*'s interest in the surplus of Company *B* on December 31, 1934, is therefore made as in the second illustration.

Adjustment K: *Increase in surplus of Company* C *since acquisition.* The increase in the surplus of Company *C* since January 1, 1934, the date of acquisition, and Company *A*'s 80% interest therein, are determined as follows:

	Company C Surplus	
	Total	Company A's 80%
Net Profit for 1934	$18,500 00	$14,800 00
Dividends Paid	3,000 00*	2,400 00*
Net Increase.	$15,500 00	$12,400 00

Working papers for fourth illustration.

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Working Papers—Year Ended December 31, 1934

	Company *A*	Company *B*	Company *C*	Adjustments and Eliminations Debit	Adjustments and Eliminations Credit	Minority	Consolidated
(Cost of Goods Sold Section—Same as in first illustration)							
PROFIT AND LOSS							
Gross Sales	300,000	225,000	120,000	170,000(A)			475,000
Returned Sales and Allowances	3,000	2,000	1,000				6 000
Net Sales	297,000	223,000	119,000				469 000
Less Cost of Goods Sold (Brought forward)	215,000	175,000	80,000	9,150	176,150		303,000
Gross Profit on Sales	82,000	48,000	39,000				166,000
Less Selling Expenses	23,000	22,000	15,000				60,000
Net Profit on Sales	59,000	26,000	24,000				106,000
Less General Expenses	24,000	9,000	3,000				36,000
Net Profit on Operations	35,000	17,000	21,000				70 000
Add Miscellaneous Income							
Dividends from Company *B*	5,400			5,400(H)			
Company *B* Profit—90%				15,300(I)	15,300(H)		
Dividends from Company *C*	2,400			2,400(K)			
Company *C* Profit—80%				14,800(L)	14,800(K)		
Rent of Equipment to Company *C*	3,000			3 000(E)			
Bond Interest from Company *C*	2,000			2,000(F)			
Net Profit on Operations and Other Income	47,800	17,000	21,000				70,000
Less Bond Interest Paid	6,000		2,500		2,000(F)		6,500
Net Income before Deduction of Minority Interests	41,800	17,000	18,500				63,500
Minority Interests							
Company *B*—10%						1,700	5,400
Company *C*—20%						3,700	
Net Income (Forward)	41,800	17,000	18,500	222,050	208,250	5,400	58,100
SURPLUS							
Surplus, December 31, 1933							
Company *A*	26,000						
Add 90% of Increase in Company *B*'s Surplus from Date of Acquisition to December 31, 1933					9,000(H)		
Intercompany Profit in Inventories				3,150(C)			
Adjusted Balance							31,850
Company *B*		25,000		22,500(I)		2,500	
Company *C*			20,000	16,000(L)		4,000	
Net Income (Brought forward)	41,800	17,000	18,500	222,050	208,250	5,400	58,100
Total	67,800	42,000	38,500			11,900	89,950

Less Dividends Paid							
Company *A*	30,000						30,000
Company *B*		6,000			5,400(I)	600*	
Company *C*			3,000		2,400(L)	600*	
Surplus, December 31, 1934 (Forward)	37,800	36,000	35,500	263,700	225,050	10,700	59,950
ASSETS							
Cash	17,800	10,000	13,500				41,300
Accounts Receivable	53,700	17,000	25,000		11,500(B)		84,200
Inventories							
Raw Materials	50,000	25,000	11,000		3,610(D)		82,390
Goods in Process	55,000	25,000			1,680(D)		78,320
Finished Goods	45,000	50,000			3,860(D)		91,140
Land	50,000	20,000	25,000				95,000
Buildings—Less Depreciation	140,000	35,000	60,000				235,000
Equipment—Less Depreciation	90,000	40,000	15,000				145,000
Investment in Stock of Company *B*—90%	108,500						
Add 90% of Increase in Company *B*'s Surplus since Date of Acquisition				18,900( )			
Eliminate							
Capital Stock					90,000(G)		
Surplus					32,400(I)		
Goodwill							5,000G
Investment in Stock of Company *C*—80%	66,000						
Add 80% of Increase in Company *C*'s Surplus since Date of Acquisition				12 400(K)			
Eliminate							
Capital Stock					40,000(J)		
Surplus					28,400(L)		
Goodwill							10,000G
Investment in Bonds of Company *C*	40,000						40,000
	716,000	222,000	149 500				907,350
LIABILITIES AND NET WORTH							
Accounts Payable	78,200	86,000	14,000	11,500(B)			166,700
Bonds Payable							
Company *A*	100,000						100,000
Company *C*			50,000				50,000
Capital Stock							
Company *A*	500,000						500,000
Company *B*		100,000		90,000(G)		10,000	
Company *C*			50,000	40,000(J)		10,000	
Surplus (Brought forward)	37,800	36,000	35,500	263,700	225,050	10,700	59,950
Total Minority Interest						30,700	30,700
	716 000	222 000	149 500	436 500	436,500		907,350

The adjustment in the working papers is as follows:

	Section	Debit	Credit
Investment in Company *C*	Assets	$12,400	
Dividends from Company *C* (to close)	P & L	2,400	
Company *C* Profit (to take up 80% of year's profit)			$14,800

The elimination (L) of Company *A*'s interest in the surplus of Company *C* on December 31, 1934, is the same as elimination L in the second illustration, on page 365.

Consolidated statements.—The consolidated statements prepared from the working papers of the fourth illustration would be the same as those prepared from the working papers of the second illustration.

Reserve for intercompany profit in inventories.—Instead of showing the inventories in the consolidated balance sheet at the net amounts after deducting the unrealized intercompany profit, it may be desired to show a reserve for intercompany profit in the balance sheet so as to indicate that a conservative accounting procedure has been followed in eliminating the intercompany profit. To accomplish this purpose, the inventories may be shown in the balance sheet as follows:

Inventories		
Raw Materials	$ 86,000 00	
Goods in Process	80,000 00	
Finished Goods.	95,000 00	
Total	$261,000 00	
Less Reserve for Intercompany Profit	9,150 00	$251,850 00

If this procedure is to be followed in the consolidated balance sheet, the adjustment may be entered in the balance sheet papers in the manner already illustrated, or as shown on the opposite page.

Alternative form of working papers.—If consolidated statements are to be prepared from trial balances instead of from company statements, working papers in the form illustrated on pages 379 to 381 may be found more convenient than those previously illustrated. The working papers in the alternative form are based on the same assumed facts as those of the first illustration in this chapter. All of the adjustments and eliminations appearing in the working papers of the first illustration appear also in the working

	Company A	Company B	Company C	Adjustments and Eliminations		Minority	Consolidated
				Debit	Credit		
Inventories, December 31, 1934:							
Raw Materials	50,000 00	25,000 00	11,000 00				86,000 00
Goods in Process	55,000 00	25,000 00					80,000 00
Finished Goods	45,000 00	50,000 00					95,000 00
Reserve for Intercompany Profit in Inventories					9,150 00		9,150 00*

* Deduction.

papers in the alternative form, and bear the same identifying letters Since the trial balances do not contain the closing inventories, another adjustment is necessary to introduce these inventories into the papers; this adjustment has been given the number 1 so that the other adjustments and eliminations in this illustration will carry the same letters as those in the first illustration. Normally, this inventory adjustment would carry a letter. Working papers in the alternative form are prepared as follows:

Enter the trial balances in the working papers, leaving room for eliminations after the Investment accounts and after the Capital Stock and Surplus accounts. Add the Trial Balance columns to detect any possible errors in copying.

Enter the adjustments and eliminations. The adjustment for the closing inventories includes debits which are extended to the Balance Sheet column, and credits which are extended (after elimination of intercompany profits) to the Cost of Sales column. Note that the inventories are listed in detail on the credit sheet in the Trial Balance columns so that they can be readily included in the nominal elements when the profit of each company is determined.

Extend the trial balance amounts, plus or minus adjustments, to the appropriate columns.

Determine the net profit of each company by totaling the nominal elements in the Trial Balance columns of the debit and credit sheets, and deducting the total debits from the total credits. This deduction appears on the credit sheet.

Foot the Adjustment and Elimination columns.

Determine the cost of sales by footing the Cost of Sales columns on the two sheets and deducting the total credits from the total debits. This deduction is made on the debit sheet, and the cost of sales is extended to the Profit and Loss column.

Determine the net profit for the year by footing the Profit and Loss columns on the two sheets and deducting the total debits from the total credits. This deduction is made on the credit sheet. The minority interests

COMPANY *A* AND SUBSIDIARIES *B* AND *C*
Consolidated Working Papers
For the Year Ended December 31, 1934

Debits	Company *A*	Company *B*	Company *C*	Adjustments and Eliminations: Debit	Adjustments and Eliminations: Credit	Cost of Sales	Profit and Loss	Balance Sheet: Goodwill	Balance Sheet: Sundry
Cash	40,000	16,000	16,500						72,500
Accounts Receivable	53,700	17,000	25,000		11,500(B)				84,200
Inventories									
Raw Materials	40,000	15,000	15,000		1,800(C)	68,200			
Goods in Process	25,000	30,000			1,350(C)	53,650			
Finished Goods		30,000				30,000			
Land	50,000	20,000	25,000						95,000
Buildings—Less Depreciation	140,000	35,000	60,000						235,000
Equipment—Less Depreciation	90 000	40 000	15 000						145,000
Purchases	145,000	95,000	76,000		170,000(A)	146,000			
Direct Labor	85,000	65,000				150,000			
Manufacturing Expense	70,000	40,000			3,000(E)	107,000			
Returned Sales and Allowances	3,000	2,000	1,000				6,000		
Selling Expenses	23,000	22,000	15,000				60,000		
General Expenses	24,000	9,000	3,000				36,000		
Bond Interest Paid	6,000		2,500		2,000(F)		6,500		
Investment in Stock of Company *B*—90%	132,800								
Eliminate									
Capital Stock					90,000(G)				
Surplus					37,800(I)				
Goodwill								5,000	
Investment in Stock of Company *C*—80%	80,800								
Eliminate									
Capital Stock					40,000(J)				
Surplus					30,800(L)				
Goodwill								10,000	
Investment in Bonds of Company *C*	40 000								40,000
	1,048,300	436,000	254,000						
Inventories, December 31, 1934									
Raw Materials				86,000(1)					86,000
Goods in Process				80,000(1)					80,000
Finished Goods				95,000(1)					95,000
Total Debits to Nominal Accounts—Deducted contra	421,000	308,000	112,500						
Adjustment Column Totals (Forward)				261,000	388,250				
Total Debits to Cost of Sales						554,850			
Less Total Credits to Cost of Sales—Per contra						251,850			
Cost of Sales—To Profit and Loss						303,000	303,000		
Total Debits to Profit and Loss—Deducted contra							411 500		
Total Goodwill								15,000	15,000
									947,700

Consolidated Working Papers—(*Continued*)

Credits	Company *A*	Company *B*	Company *C*	Adjustments and Eliminations: Debit	Adjustments and Eliminations: Credit	Cost of Sales	Profit and Loss	Balance Sheet: Minority Interest	Balance Sheet: Surplus	Balance Sheet: Sundry
Adjustment Totals (Forward)				261,000	388,250					
Accounts Payable	78,200	86,000	14,000	11,500(B)						166,700
Bonds Payable										
Company *A*	100,000									100,000
Company *C*			50,000							50,000
Gross Sales	300,000	225,000	120,000	170,000(A)			475,000			
Rent of Equipment to Company *B*	3,000			3,000(E)						
Bond Interest from Company *C*	2,000			2,000(F)						
Capital Stock										
Company *A*	500,000									500,000
Company *B*		100,000								
Eliminate Parent Company's 90%				90,000(G)						
Minority—10%								10,000		
Company *C*			50,000							
Eliminate Parent Company's 80%				40,000(J)						
Minority—20%								10,000		
Surplus—December 31, 1933										
Company *A*	35,000									
Adjustment for Intercompany Profit in Opening Inventory				3,150(C)						
Adjusted Surplus									31,850	
Company *B*		25,000								
Eliminate Parent Company's 90%				22,500(I)						
Minority—10%								2,500		
Company *C*			20,000							
Eliminate Parent Company's 80%				16,000(L)						
Minority—20%								4,000		
Company *B* Profit	15,300			15,300(I)						
Company *C* Profit	14,800			14,800(L)						
	1,048,300	436,000	254 000							
Inventories, December 31, 1934										
Raw Materials	50,000	25,000	11,000	3,610(D)	86,000(1)	82,390				
Goods in Process	55,000	25,000		1,680(D)	80,000(1)	78,320				
Finished Goods	45,000	50,000		3,860(D)	95,000(1)	91,140				
Reserve for Intercompany Profit in Dec 31, 1934 Inv					9,150(D)					9,150
Total Credits to Nominal Accounts	485,100	325,000	131,000							

Less Debits to Nominal Accounts—Contra	421,000	308,000	112,500							
Net Profit Per Books	64,100	17,000	18,500	658,400	658,400					
Total Credits to Cost of Sales—Deducted Contra						251,850				
Total Credits to Profit and Loss							475,000			
Total Debits to Profit and Loss—Per Contra							411,500			
Net Profit for the Year							63,500			
Minority Interest in Co *B*—10% of $17,000 00							1,700*	1,700		
Minority Interest in Co *C*—20% of $18,500 00							3,700*	3,700		
Parent Company's Share of Net Profit							58,100		58,100	
Total Minority Interest								31,900		31,900
Total Surplus									89,950	89,950
										947,700

are then deducted from the net profit and are entered in the Minority column; the parent company's interest in the net profit for the year is then extended to the Surplus column.

The total of the Goodwill column (debit sheet) and the totals of the Minority Interest and Surplus columns (credit sheet) are extended to the Balance Sheet columns, and the Balance Sheet columns are totaled.

Minority and Surplus columns may be used on the debit sheet if Deficit account balances appear on the debit side of the trial balances or if there are accounts with debit balances representing charges for dividend payments. Or, these debit balances may be entered in red ink on the credit sheet.

CHAPTER 51

CONSOLIDATIONS, MERGERS, AND FINANCING

Purposes of combinations.—The modern trend of business organization has been toward the combination of competing firms and corporations into consolidated or affiliated companies Some doubt has been raised by economists, and particularly by sociologists, regarding the desirability of this trend, and many combinations have been forced to dissolve because the Federal courts have regarded them as "combinations in restraint of trade" and hence in violation of the Sherman Anti-Trust law. At the date of this writing, there appears to be less assurance of the social benefits of free competition, and an increasing inclination to sanction the reduction of competition but to increase the governmental control over industry.

Industrialists have generally held, although not without some dissenting voices, that combinations reduce costs and expenses, and hence increase profits. It is claimed that these advantages result from

(1) The reduction of competition in the buying market, thus tending to give the combination a certain measure of control over the costs of material and labor.

(2) The enlargement of the scope of production, enabling the combination to:
   - (a) Own and operate the sources of its raw materials.
   - (b) Carry manufacture through successive stages, as in the case of a company owning timber lands, producing lumber, and manufacturing furniture.
   - (c) Process and market its own by-products.
   - (d) Obtain the benefits of division of labor among workmen and among plants, which is an incident of large-scale production

(3) The elimination of duplicate sales effort and expense
(4) The elimination of duplicate administrative effort and expense.
(5) The increase in the control of sales prices which results from the elimination of competition in the selling market.
(6) The increase in financing ability resulting from the increase in the amount of capital controlled and the more ready access to large sources of credit.

Methods of combining.—The devices which have been most frequently used in combining two or more corporations into a coördinated organization with a centralized control, or into a single company, are:

(1) Methods of obtaining centralized control of several companies:
  (a) Interlocking directorates.
  (b) Voting trusts.
  (c) Parent companies.
(2) Methods of combining several companies into one company:
  (a) Consolidation.
  (b) Merger.

Interlocking directorates.—If companies whose operations are normally in competition with, or dependent upon, one another, have boards of directors which include members serving on more than one board, a certain degree of common control may be obtained. If there are enough directors in common, the policies of the several companies will be subject to the same direction, and may be determined on a basis of their mutual benefit.

Voting trusts.—At the beginning of the era of great combinations, the voting trust was one of the most popular methods of effecting a unified control of competing businesses. The stockholders of each company, or a majority thereof, transferred their stock certificates to trustees in exchange for certificates of beneficial interest in the trust. The trustees, holding voting control of the corporations, elected the directors of the corporations, and were thus able to control the activities of the companies as effectively as if the corporations

were a single company.

When the voting trust was held to be illegal, the attention of those interested in effecting or maintaining combinations was turned toward the parent, or holding, company.

Parent companies.—A parent company is a corporation which owns all, or a voting majority, of the stock of another corporation, and is thus in a position to control that corporation by electing its board of directors.

If several companies are to be combined by means of a parent company, a new corporation may be organized to act in that capacity, or one of the old companies may acquire the stock of the other companies. The stockholders who sell their stock to the parent company may be paid in cash or in securities of the parent company. In either case, the parent company purchases the stock of the companies to be controlled, but does not purchase their assets or assume their liabilities. Therefore the controlled companies remain in existence and in the possession of their properties; so far as they are concerned, the only change made is the change in the personnel of their stockholders.

Consolidations and mergers.—If the combination is effected by a consolidation or a merger, several companies may be replaced by a single company which will own all of the assets formerly owned by the old companies, and owe all of the debts which the old companies formerly owed. Certain assets and liabilities may be left with the old companies, but this does not affect the general nature of the consolidation or the merger. Payment for the net assets acquired may be made in cash or by the issuance of stock or other securities.

A distinction is sometimes made between a consolidation and a merger, as follows:

A consolidation is effected if a new corporation is organized which buys the assets and assumes the liabilities of the old companies.

A merger is effected if one of the old corporations buys the assets and assumes the liabilities of the others.

This distinction, however, is not usually recognized, and the two terms are generally used interchangeably.

Net assets and net earnings.—If a combination of two or more companies is contemplated, it may be promoted by outsiders who desire to obtain the companies, or it may be promoted by the companies themselves. In either instance, consideration should be given to the value of the net assets and the amount of the net earnings of the several companies.

If the combination is being promoted by the companies themselves, a consolidation committee should be organized, consisting of members from all of the companies. This committee, with the assistance of an appraiser, an accountant, and an attorney, should submit a report embodying statements of the net assets and the net earnings of each company, and the proposed method of effecting the combination.

The accountant, after making audits of all companies, should submit a balance sheet of each company, stating the values at which it is proposed to take over the assets, and the liabilities to be assumed. The balance sheet should show the fixed assets at values determined by the appraiser, and the inventories at values determined by the appraiser or the committee.

The accountant should also submit income and surplus statements for the several companies. In preparing the income statements, the accountant should give consideration to the following matters:

(1) Number of years to be covered.

Profit and loss statements should be submitted for several years, in order to show the trend of profits; the value of the goodwill of each company depends, to some extent, upon whether its profits have been uniform year after year, or have steadily increased or decreased, or have fluctuated from year to year. Moreover, one year's statement may not be a fair basis for goodwill valuation because the year may have been characterized by extraordinary conditions.

(2) Correctness of the profits.

Adjustments may have to be made in the statements prepared by the companies themselves because errors have been made, such as:

- (a) Incorrect distributions between capital and revenue.
- (b) Failure to make provision for depreciation.

bad debts, and other expenses.
- (c) Failure to provide adequate repairs
- (d) Anticipation of profits on consignments, and so forth.

(3) Uniformity of bases of computing profits.
- (a) Methods of computing manufacturing costs may have differed in the several companies; if possible, the cost statements should be revised and put on a uniform basis.
- (b) Depreciation may have been computed by different methods. For instance, one company may have used the straight-line method and another the diminishing-value method, each may eventually provide adequate depreciation, but the annual charges will not be on a uniform basis.
- (c) Management salaries may have differed widely in amount, and may require adjustment to a common basis.
- (d) If a partnership is to be included in the consolidation, and if interest on capital has been treated as an expense in the profit and loss statements, the interest should be added back to the profits.

(4) Adjustments from a historical basis to a prospective basis.

The actual operating profits of the past may differ from those which can be expected in the future under consolidated conditions. For example:
- (a) Depreciation charges in the past have presumably been based on cost, in the future they will be based on the appraised values at which the assets are acquired by the consolidated company. If the depreciation charges are thereby increased, the profits will be correspondingly decreased, it would seem, therefore, that the prospective depreciation charges should be applied retroactively to the statements for prior years
- (b) It is often stated that interest on borrowed capital should not be included as an expense,

in determining the profits which are to be taken as a basis for goodwill valuation. If this theory is accepted, the statements should show the net income before deduction of interest. However, the author questions this theory, for reasons fully discussed in Chapter 18.

Payments for acquired companies.—After an agreement has been reached, and accepted by all companies, concerning the net asset values and the earnings of each company to be used as a basis for consolidation, the manner of payment remains for consideration. Payment may be made, in whole or in part, in:

Common stock.
Preferred stock.
Bonds.
Cash.
Short-term obligations.

Some matters to be borne in mind before a decision is made regarding the mode of payment are discussed and illustrated on the following pages.

Basis of illustrations.—For purposes of illustration let us assume the following facts with respect to three companies:

	Company *A*	Company *B*	Company *C*	Total
Net Assets				
Assets:				
Fixed	$150,000	$150,000	$100,000	$ 400,000
Other	150,000	275,000	575,000	1,000,000
Total assets	$300,000	$425,000	$675,000	$1,400,000
Liabilities	100,000	125,000	175,000	400,000
Net assets	$200,000	$300,000	$500,000	$1,000,000
Per cent of each company's net assets to total net assets	20%	30%	50%	100%
Annual Net Earnings:				
Amount of net earnings	$ 30,000	$ 30,000	$ 40,000	$ 100,000
Per cent of each company's net earnings to total net earnings	30%	30%	40%	100%
Per cent of each company's net earnings to its net assets	15	10	8	

Interests in net assets and net earnings.—To effect an equitable consolidation of the three companies, consideration should be given to the portion of the total net assets and the portion of the total net earnings contributed by each company. These portions are:

	Company *A*	Company *B*	Company *C*
Per cent of total net assets	20%	30%	50%
Per cent of total net earnings	30	30	40

But how can the stockholders of Company *A*, for instance, obtain a 20% interest in the net assets of the consolidation and a 30% interest in its earnings? And how can the stockholders of Company *C* obtain a 50% interest in the consolidated net assets but only a 40% interest in its net earnings?

Such a theoretically desirable distribution of equities in the consolidated company may be impracticable or impossible, but it should always be remembered that consolidating companies are contributing net assets and net earnings, and that the ratio of each company's net assets to the total net assets, and the ratio of each company's net earnings to the total net earnings, should be given full consideration in determining the payments, in securities or otherwise, to be made to each company or its stockholders.

Illustrations.—The following cases illustrate some of the principles involved in the distribution of securities incident to a consolidation. The securities may be issued to the consolidating companies, or directly to their stockholders; in the discussion of the cases, we may therefore refer to the stockholders, or to the companies as representative of their stockholders. In testing the equity of the stock distributions from the standpoint of interests in net earnings, we shall assume that all of the annual earnings of the consolidation are distributed in dividends

Payment in common stock only.—If payment to the consolidating companies is made in common stock only, proper recognition cannot be given to the fact that a company does not contribute the same per cent of net assets and of net earnings. This point is demonstrated by the first three cases.

Case 1: COMMON STOCK ISSUED IN THE RATIO OF NET ASSETS.—If common stock of a par or stated value of $1,000,000.00 is issued to the three companies (see foregoing statement of assumed facts) in amounts proportionate to their net assets, each old company will receive an equitable interest in the net assets of the consolidation. But the interests in future earnings will not be proportionate to the past earnings of the three companies, as shown by a comparison of the future and past distributions of earnings of $100,000.00:

	Company *A*	Company *B*	Company *C*	Total
Per cent of stock held	20%	30%	50%	100%
Distribution of consolidated earnings	$20,000	$30,000	$50,000	$100,000
Distribution of past earnings	30,000	30,000	40,000	100,000
Disadvantage to Company *A*	$10,000			
Advantage to Company *C*			$10,000	

Case 2: COMMON STOCK EQUAL TO NET ASSETS, ISSUED IN RATIO OF FORMER EARNINGS.—If we now assume that common stock of a par or stated value of $1,000,000 00, the amount of the net assets, is issued to the old companies in amounts proportionate to their net earnings (instead of in proportion to their net assets, as in Case 1), the old companies will obtain equitable interests in the future earnings of the consolidation. But their interests in the consolidated net assets will not be equal to the net assets contributed by them, as shown below:

	Company *A*	Company *B*	Company *C*	Total
Stock acquired, and interest in consolidated net assets.	$300,000	$300,000	$400,000	$1,000,000
Net assets contributed	200,000	300,000	500,000	1,000,000
Advantage to Company *A*	$100,000			
Disadvantage to Company *C*			$100,000	

Case 3: COMMON STOCK ISSUED TO EACH COMPANY FOR ITS NET ASSETS AND GOODWILL.—The inequities resulting from using common stock only cannot be eliminated by basing the common stock issue upon the amount of the net assets plus an allowance for goodwill based on earnings. To illustrate, let us assume that the goodwill of each company is determined by capitalizing its net earnings at, say, 8%, and by deducting the net assets from the capitalized value thus obtained, as follows:

	Earnings	Divide By	Capitalized Value of Earnings	Deduct Net Assets	Goodwill
Company *A*	$30,000	08	$ 375,000	$ 200,000	$175,000
Company *B*	30,000	08	375,000	300,000	75,000
Company *C*	40,000	08	500,000	500,000	—
			$1,250,000	$1,000,000	$250,000

And let us further assume that common stock is issued for the total of the net assets and goodwill of each company, or, in other words, in amounts equal to the capitalized value of the earnings. Since these amounts are proportionate to the nets earnings, an equitable distribution of stock from the earnings standpoint will be obtained. But an equitable distribution of stock from the net assets standpoint is not obtained, as may be proved by the following table showing the distribution of assets in liquidation, on the assumption that the net assets at that time total $1,000,000.00, or the amount of the net assets contributed.

	Company *A*	Company *B*	Company *C*	Total
Stock owned	$375,000	$375,000	$500,000	$1,250,000
Per cent of stock owned	30 %	30 %	40 %	100 %
Distribution of assets, in ratio of stock owned	$300,000	$300,000	$400,000	$1,000,000
Net assets contributed	200,000	300,000	500,000	1,000,000
Advantage to Company *A*	$100,000			
Disadvantage to Company *C*			$100,000	

Preferred and common stocks.—Since common stock cannot be issued in both the net asset ratio and the net earnings ratio, it may be desirable to issue preferred and common stocks in amounts determined as follows:

(1) The total preferred and common shares should be allotted to the several companies in the ratio of the net earnings contributed.

(2) The preferred stock should be preferred as to assets as well as to dividends, it should be fully participating with the common, and it should be allotted to the several companies in the ratio of their contributed net assets.

(3) The number of shares of common stock to be allotted to each company should be determined by sub-

tracting the number of preferred shares to be allotted to it (as determined in 2) from the total number of shares to be allotted to it (as determined in 1).

Case 4: PREFERRED STOCK FOR NET ASSETS; COMMON STOCK FOR GOODWILL.—One illustration of the above-described procedure is shown by the following allotment of 5% preferred stock and common stock, both with a par value of $100.00 per share. The total par value of the stock to be issued is determined by capitalizing the earnings at the 5% rate applicable to the preferred stock. The use of other rates is discussed in a subsequent section.

	Company *A*	Company *B*	Company *C*	Total
Net earnings	$ 30,000	$ 30,000	$ 40,000	$ 100,000
Total par value of preferred and common stocks to be issued, computed by capitalizing the earnings at 5%	$600,000	$600,000	$800,000	$2,000,000
Deduct preferred stock—to be issued for net assets	200,000	300,000	500,000	1,000,000
Common stock—to be issued for goodwill	$400,000	$300,000	$300,000	$1,000,000

Since the preferred stock is preferred as to assets, and is issued in amounts proportionate to the net assets contributed, the stockholders of the three companies are given equitable interests in the net assets. Liquidation of the consolidated company at a time when its net assets equaled $1,000,000.00, the amount contributed, would result in returning to the stockholders of the three companies assets equal to the net assets contributed by them.

Let us now see whether the stock allotment also results in an equitable distribution of earnings, remembering that the earnings were contributed in the following amounts:

	Amount	Per Cent of Total
Company *A*	$ 30,000.00	30%
Company *B*	30,000.00	30
Company *C*	40,000.00	40
Total	$100,000.00	100%

First, we shall assume that the earnings after consolidation were exactly equal to those before consolidation. The distribution of earnings would be:

	Company A	Company B	Company C	Total
Preferred dividends.				
5% of \$200,000	\$10,000			
5% of 300,000		\$15,000		
5% of 500,000			\$25,000	
Total preferred dividends				\$ 50,000
Common dividends.				
5% of \$400,000	20,000			
5% of 300,000		15,000		
5% of 300,000			15,000	
Total common dividends				50,000
Total, equal in each case to the earnings of the predecessor company	\$30,000	\$30,000	\$40,000	\$100,000

Second, let us assume that the earnings after consolidation were 50% greater than those before consolidation. Since the preferred stock participates fully with the common, the earnings would provide for a 7½% dividend on each class of stock. The distribution of earnings would be:

	Company A	Company B	Company C	Total
Preferred dividends:				
7½% of \$200,000	\$15,000			
7½% of 300,000		\$22,500		
7½% of 500,000			\$37,500	
Total preferred dividends				\$ 75,000
Common dividends				
7½% of \$400,000	30,000			
7½% of 300,000		22,500		
7½% of 300,000			22,500	
Total common dividends				75,000
Total, equal in each case to 150% of the earnings of the predecessor company	\$45,000	\$45,000	\$60,000	\$150,000

It thus appears that an equitable distribution of earnings will be obtained if the earnings after consolidation are equal to, or in excess of, those of the predecessor companies. If the earnings after consolidation are less than those before consolidation, a lack of equity may develop in the distribution of profits, because the preferred dividends, constituting a first claim against the earnings, are distributed in the net asset ratio instead of in the earnings ratio.

To illustrate, assume that the earnings after consolidation

were only $80,000.00. This amount will provide for a 5% dividend on the preferred stock, but only a 3% dividend on the common stock. Therefore the distribution of earnings would be:

	Company *A*	Company *B*	Company *C*	Total
Preferred dividends				
5% of $200,000	$10,000			
5% of 300,000		$15,000		
5% of 500,000			$25,000	
Total preferred dividends				$50,000
Common dividends				
3% of $400,000	12,000			
3% of 300,000		9,000		
3% of 300,000			9,000	
Total common dividends				30,000
Total	$22,000	$24,000	$34,000	$80,000
Share of earnings after consolidation	27.5%	30%	42.5%	100%
Share of earnings before consolidation	30.0	30	40.0	100
Disadvantage to Company *A*	2.5%			
Advantage to Company *C*			2.5%	

This inequitable distribution of earnings could be avoided by making the preferred stock preferred as to assets only, with no preference as to dividends, but with the right to full participation with the common in all dividends. If the preferred stock were of this nature, the distribution of $80,000.00 of earnings would be:

	Company *A*	Company *B*	Company *C*	Total
Preferred dividends at 4%	$ 8,000	$12,000	$20,000	$40,000
Common dividends at 4%	16,000	12,000	12,000	40,000
Total	$24,000	$24,000	$32,000	$80,000
Share of earnings after consolidation	30%	30%	40%	100%
Share of earnings before consolidation	30	30	40	100

It may be contended, however, that the issuance of such preferred stock would not be equitable, because adequate recognition is not given to assets contributed unless the preferred stock issued therefor assures its holders dividends at a reasonable rate, even though the consolidated earnings are not sufficient to pay a comparable dividend on the common stock issued for goodwill. And, from the standpoint of practical considerations, it would probably be undesirable to eliminate the feature of preference as to dividends, because of the adverse effect upon the marketability of the stock.

Preferred stock should be fully participating.—If the preferred stock is non-participating, an inequitable distribution of earnings may result.

Case 5: NON-PARTICIPATING PREFERRED STOCK.—Assuming the same distribution of preferred and common stocks as in Case 4, except that the preferred stock is non-participating, and assuming that the profits after consolidation are 150% of those before consolidation, the distribution of earnings will be as follows:

	Company *A*	Company *B*	Company *C*	Total
Preferred dividends:				
5% of \$200,000	\$10,000			
5% of 300,000		\$15,000		
5% of 500,000			\$25,000	
Total preferred dividends				\$ 50,000
Common dividends:				
10% of \$400,000	40,000			
10% of 300,000		30,000		
10% of 300,000			30,000	
Total common dividends				100,000
Total	\$50,000	\$45,000	\$55,000	\$150,000
Share of earnings after consolidation	33⅓%	30%	36⅔%	100%
Share of earnings before consolidation	30	30	40	100
Advantage to Company *A*	3⅓%			
Disadvantage to Company *C*			3⅓%	

Use of stock without par value.—The use of par value common stock in Case 4 resulted in placing a very large value on the goodwill. The balance sheet in Case 4, immediately after the consolidation was effected, would appear as follows:

Balance Sheet

Net Assets	\$1,000,000 00	Preferred Stock	\$1,000,000 00
Goodwill	1,000,000 00	Common Stock	1,000,000 00
	\$2,000,000 00		\$2,000,000 00

Such a disproportionate goodwill valuation may be avoided by using common stock without par value.

Case 6: COMMON STOCK WITHOUT PAR VALUE.—Instead of issuing 10,000 shares of par value common stock, as in Case 4, the same number of shares might be issued without par value, but with a small stated value, such as \$1.00 or \$5.00 per share. But, to insure an equitable distribution of earnings, the no-par common stock should have the same dividend rights per share as those of the par value stock issued in Case 4.

Case 7 Preferred stock without par value.—The stock distribution in both Case 4 and Case 6 is subject to the possible criticism that the balance sheet indicates the existence of no asset value other than goodwill behind the common stock. The basis for this criticism can be eliminated by using no-par preferred stock as well as no-par common stock. The same numbers of preferred and common shares should be issued as in Cases 4 and 6, and the preferred stock should be given a liquidating value of $100.00 per share. But a smaller nominal value could be assigned to the preferred stock, and the excess of the net assets over the nominal value of the preferred stock could be set up as the nominal value of the common stock. To illustrate, assume that no goodwill value is placed on the books of the consolidated company and that the preferred stock is given a nominal value of $60.00 per share The balance sheet immediately after consolidation will appear as follows:

Assets	
Net Assets	$1,000,000 00
Net Worth	
Preferred Stock—10,000 shares, liquidating value, $100 00 per share, stated value, $60 00 per share	$ 600,000 00
Common Stock—10,000 shares, at a stated value of $40 00 per share . .	400,000 00
	$1,000,000 00

The dividend rights of the two classes of stock should be the same as in Case 4: the preferred should be entitled to a preference dividend of $5.00 per share, and to full participation with the common after a dividend of $5.00 per share has been paid on the common stock.

The use of no-par stock does not destroy the equitable distribution of earnings and asset interests, as shown below:

	Company *A*	Company *B*	Company *C*	Total
Interests in Earnings:				
Number of preferred shares	2,000	3,000	5,000	10,000
Number of common shares	4,000	3,000	3,000	10,000
Total	6,000	6,000	8,000	20,000
Per cent of stock owned, and consequent participation in earnings	30%	30%	40%	100%
Per cent of earnings contributed	30	30	40	100

Interests in Net Assets				
Number of shares of preferred	2,000	3,000	5,000	10,000
Liquidating value at $100 00 per share	$200,000	$300,000	$500,000	$1,000,000
Net assets contributed	200,000	300,000	500,000	1,000,000

Determining total preferred and common shares.—Any method may be used for determining the total preferred and common shares to be issued, provided that:

(1) The aggregate dividend rights of the total shares allotted to the several companies are proportionate to the earnings contributed.

(2) The par or liquidating value of the preferred stock issued to each company is equal to the net assets contributed.

In Case 4, the total stock to be issued was determined by capitalizing the earnings of each company at 5%, the preference rate of the preferred stock. Other rates may, of course, be used for the preferred stock, and for capitalizing the net income, but:

The rate used in capitalizing the earnings should be not less than the preferred dividend rate, nor more than the lowest rate earned by any company on its net assets.

The application of this rule is illustrated by the three following cases.

Case 8. PREFERRED RATE, 6%, EARNINGS CAPITALIZED AT 8%.—This case conforms to the rule just stated, the capitalization rate, 8%, is not less than the 6% preferred dividend rate, nor more than the lowest rate earned by any company (Company *C* earned 8%) It will be assumed that the stock is given a par value of $100.00 per share; previous cases have shown that no-par stock might be used. The stock distribution is shown below:

	Company *A*	Company *B*	Company *C*	Total
Net earnings	$ 30,000	$ 30,000	$ 40,000	$ 100,000
Total par of preferred and common stocks to be issued, computed by capitalizing net earnings at 8%	$375,000	$375,000	$500,000	$1,250,000
Preferred stock—for net assets.	200,000	300,000	500,000	1,000,000
Common stock—for goodwill	$175,000	$ 75,000	—	$ 250,000

Equitable interests in the net assets are given to the three companies, because the preferred stock issued to them is equal to the net assets contributed. Let us now test the equity of the stock allotment from the earnings standpoint.

First, assume that the earnings after consolidation are the same as before, \$100,000.00. The preferred and common stocks will total 12,500 shares; since the preferred participates fully with the common, the earnings will provide for dividends of \$8.00 per share on the two classes of stock. The distribution of earnings will therefore be:

	Company *A*	Company *B*	Company *C*	Total
Preferred dividends				
8% of \$200,000	\$16,000			
8% of 300,000		\$24,000		
8% of 500,000			\$40,000	
Total preferred dividends				\$ 80,000
Common dividends				
8% of \$175,000	14,000			
8% of 75,000		6,000		
Total common dividends				20,000
Total—equal in each case to earnings before consolidation	\$30,000	\$30,000	\$40,000	\$100,000

Second, assume that the earnings after consolidation are \$150,000.00. The distribution thereof will be:

	Company *A*	Company *B*	Company *C*	Total
Preferred dividends.				
12% of \$200,000	\$24,000			
12% of 300,000		\$36,000		
12% of 500,000			\$60,000	
Total preferred dividends				\$120,000
Common dividends				
12% of \$175,000	21,000			
12% of 75,000		9,000		
Total common dividends				30,000
Total	\$45,000	\$45,000	\$60,000	\$150,000
Share of earnings after consolidation	30%	30%	40%	100%
Share of earnings before consolidation	30	30	40	100

Case 9: PREFERRED RATE, 6%; EARNINGS CAPITALIZED AT 5%.—This case does not conform to the stated rule; the capitalization rate is less than the preferred dividend rate. The distribution of stock will be as follows:

	Company *A*	Company *B*	Company *C*	Total
Net earnings	$ 30,000	$ 30,000	$ 40,000	$ 100,000
Total par of preferred and common stocks to be issued, computed by capitalizing net earnings at 5%	$600,000	$600,000	$800,000	$2,000,000
Preferred stock—for net assets	200,000	300,000	500,000	1,000,000
Common stock—for goodwill	$400,000	$300,000	$300,000	$1,000,000

Since the preferred stock is issued on the basis of net assets, equitable interests in the net assets are maintained. To test the equity of the distribution of earnings, assume that the consolidated profits are $100,000.00, as they were before the consolidation. These would be sufficient to pay an average dividend of 5% on the total stock. But the preferred rate is 6%, and hence only 4% can be paid on the common stock.

	Company *A*	Company *B*	Company *C*	Total
Preferred dividends:				
6% of $200,000	$12,000			
6% of 300,000		$18,000		
6% of 500,000			$30,000	
Total preferred dividends				$ 60,000
Common dividends				
4% of $400,000	16,000			
4% of 300,000		12,000		
4% of 300,000			12,000	
Total common dividends				40,000
Totals—Shares of consolidated income	$28,000	$30,000	$42,000	$100,000
Net earnings contributed	30,000	30,000	40,000	100,000
Disadvantage to Company *A*	$ 2,000			
Advantage to Company *C*			$ 2,000	

To obtain an equitable distribution of earnings, the profits must be adequate to provide for a dividend at a uniform rate on both classes of stock, since the preferred bears 6%, the required profits are 6% of $2,000,000.00, or $120,000.00. If profits of that amount are made, the distribution will be:

	Company *A*	Company *B*	Company *C*	Total
Dividends on both classes of stocks at 6%:				
6% of $600,000	$36,000			
6% of 600,000		$36,000		
6% of 800,000			$48,000	
Total				$120,000
Share of earnings after consolidation	30%	30%	40%	100%
Share of earnings before consolidation	30	30	40	100

Case 10 Preferred rate, 6%; earnings capitalized at 10%.—This case also fails to conform to the stated rule, because the capitalization rate, 10%, is greater than the 8% rate earned by Company *C* on its net assets. The distribution of stock will be:

	Company *A*	Company *B*	Company *C*	Total
Net earnings	$ 30,000	$ 30,000	$ 40,000	$ 100,000
Total par of preferred and common stocks to be issued, computed by capitalizing earnings at 10%	$300,000	$300,000	$400,000	$1,000,000
Preferred stock—for net assets	200,000	300,000	500,000	1,000,000

The inequity of this procedure immediately becomes apparent. Company *C* is entitled to preferred stock of a par (or liquidating) value of $500,000 00 for its net assets; but since the earnings were capitalized at a rate greater than that earned by Company *C*, the total stock allotted to it was only $400,000 00.

Problem of a company with low earnings.—A difficult problem arises if one company's rate of earnings has been considerably less than a reasonable preferred dividend rate. Assume, for example, the following facts with respect to Company *D*·

Net assets	$300,000 00
Net earnings	6,000 00
Rate of net earnings on net assets	2%

If the consolidated company issues 6% preferred stock for the net assets, the allotment to this company of $300,000.00 of preferred stock for its net assets will entitle it to dividends of $18,000 00, although it contributed only $6,000.00 of earnings to the consolidation. If the company is given only $100,000 00 of preferred stock, an amount sufficient to entitle it to dividends of $6,000 00, it will not receive adequate consideration for the net assets contributed.

This condition might be met by the issuance of a special class of preferred stock with a low dividend rate, but such a solution would usually be impracticable. Some compromise probably would be necessary, such as the issuance of preferred stock of a smaller amount than that indicated by the net assets, but of a larger amount than that indicated by the earnings. For instance, in the above case, the company

might receive 6% preferred stock of a par value of $200,000.00, carrying a dividend right of $12,000.00. As a compensation for its sacrifice from the net asset standpoint, the company would obtain an advantage from the earnings standpoint.

The use of bonds.—Stockholders considering the consolidation of their company with other companies sometimes desire to be paid partly in bonds secured by the fixed assets. The bonds rank ahead of general, unsecured creditors; they entitle their holders to interest regardless of profits, and they may be sold to obtain funds without parting with stock interests. While these may be advantages, the use of bonds involves a difficulty in maintaining an equitable distribution of earnings if the consolidated earnings differ from those of the predecessor companies.

We have seen that an equitable distribution of earnings requires that the preferred stock be fully participating with the common. Unless the bonds are similarly participating (a most unusual feature of bonds), a stockholder who accepts a 6% bond instead of a share of 6% participating preferred stock, is giving up a right to participate in excess profits in exchange for such benefits as may accrue to him from the possession of bonds. And if the bonds bear a lower rate than the preferred stock, a further loss of income is suffered.

Case 11. BONDS, PREFERRED STOCK, AND COMMON STOCK.—Let us assume that Companies *A*, *B*, and *C* are consolidated by issuance of:

5% bonds, of a par value equal to 80% of the fixed assets.
6% preferred stock for the remainder of the net assets.
Common stock for goodwill, based on the profits contributed in excess of bond interest and preferred dividends to be received.

The allotment of securities may be determined as follows:

	Company *A*	Company *B*	Company *C*	Total
Fixed assets	$150,000	$150,000	$100,000	$ 400,000
Net assets	200,000	300,000	500,000	1,000,000
Earnings	30,000	30,000	40,000	100,000
Bonds—80% of fixed assets	$120,000	$120,000	$ 80,000	$ 320,000
Preferred stock—remainder of net assets	80,000	180,000	420,000	680,000
Common stock (see page 402)	320,000	220,000	180,000	720,000

The computation of the allotment of common stock is shown below:

Net earnings	$ 30,000	$ 30,000	$ 40,000	$ 100,000
Deduct Bond interest—5%	$ 6,000	$ 6,000	$ 4,000	$ 16,000
Preferred dividend—6%	4,800	10,800	25,200	40,800
Total	$ 10,800	$ 16,800	$ 29,200	$ 56,800
Remainder of earnings contributed—distribution thereof to be provided by issuance of common stock	$ 19,200	$ 13,200	$ 10,800	$ 43,200
Par value of common stock, computed by capitalizing remaining earnings at 6%	$320,000	$220,000	$180,000	$ 720,000

A 6% capitalization rate is used in determining the par value of the common stock to be issued, because this is the preference rate for the preferred stock.

If the earnings after consolidation are the same as those prior to consolidation, the earnings distributed to the former stockholders of the three companies will be the same as the former earnings of the three companies, as shown below:

	Company A	Company B	Company C	Total
Bond interest:				
5% of $120,000	$ 6,000			
5% of 120,000		$ 6,000		
5% of 80,000			$ 4,000	
Total bond interest				$ 16,000
Preferred dividends				
6% of $ 80,000	4,800			
6% of 180,000		10,800		
6% of 420,000			25,200	
Total preferred dividends				40,800
Common dividends.				
6% of $320,000	19,200			
6% of 220,000		13,200		
6% of 180,000			10,800	
Total common dividends				43,200
Totals—same as before consolidation	$30,000	$30,000	$40,000	$100,000

But let us now assume that the profits after consolidation increase to $296,000.00, and note the effect of the bonds (which bear 5% interest, without further participation in profits) upon the distribution of the earnings. The bond interest totals $16,000.00, leaving $280,000.00 for dividends on the preferred and common stocks. Since these two classes of stock have an aggregate par value of $1,400,000.00, and since the preferred is fully participating, each class of stock has

earned 20%. The distribution of the profits, including bond interest, is shown below.

	Company A	Company B	Company C	Total
Bond interest:				
5% of \$120,000	\$ 6,000			
5% of 120,000		\$ 6,000		
5% of 80,000			\$ 4,000	
Total bond interest				\$ 16,000
Preferred dividends				
20% of \$ 80,000	16,000			
20% of 180,000		36,000		
20% of 420,000			84,000	
Total preferred dividends				136,000
Common dividends:				
20% of \$320,000	64,000			
20% of 220,000		44,000		
20% of 180,000			36,000	
Total common dividends				144,000
Total	\$86,000	\$86,000	\$124,000	\$296,000
Share of earnings after consolidation	29%	29%	42%	100%
Share of earnings before consolidation	30	30	40	100

Cash and short-term obligations.—In all of the preceding cases it was assumed that the stockholders of the old companies became stockholders of the consolidated company; the problem of settlement therefore involved a distribution of securities in such a manner as to give the stockholders equitable interests in the assets and the earnings. If the old stockholders are bought out, and are paid immediately in cash, or partly in cash and partly in short-term obligations, their subsequent sharing of profits will be eliminated, and the settlement will be based on acceptable offers from the purchasers. However, the amounts to be paid should still be governed by the amounts of net assets and net earnings.

If the stockholders of the old companies wish to retain stock control of the consolidated company, but to obtain certain amounts of cash immediately, or in the near future, through the payment of short-term obligations issued by the consolidated company, or if certain assets are not to be transferred to the consolidated company, proper consideration should be given to the effect of such cash withdrawals or asset withholdings upon the net assets for which preferred stock is to be issued, and the effect upon the earnings taken as a basis for the allotment of common stock.

Modifications.—The procedures discussed and illustrated in the preceding pages are merely indicative of the principles to be borne in mind in effecting consolidations; they cannot be accepted as procedures to be invariably followed.

The general desirability of issuing both preferred and common stocks to the stockholders of the predecessor companies has been emphasized; however, if new funds are required, the old stockholders may have to accept common stock only, in order that the preferred stock may be reserved for issuance to the suppliers of new capital.

The general desirability of making the preferred stock issued to the old stockholders fully participating has been discussed; but the poor profit record of certain companies may make this provision in the preferred stock impracticable.

In the cases illustrated, the stockholders of all companies shared ratably in all classes of securities issued; but the stockholders of one or more companies may desire to withdraw from the management, leaving the control to others, and taking cash, bonds, or preferred stock for their interests.

These and other matters almost invariably require modifications in the methods described, but the illustrations serve to indicate the basic principles involved in safeguarding the stockholders of several consolidating companies in their interests in the assets and earnings of the consolidation.

Balance sheets giving effect to financing.—When securities are offered to the public in connection with a consolidation of several companies or otherwise, accountants are usually asked to prepare, for publication in the offering sheet, a balance sheet of the issuing company giving effect to the financing. To illustrate, assume that investment bankers have agreed to purchase, as of March 1, 1934, a company's bonds of a par value of $100,000 00 at 95. The bankers, in preparing the offering sheet to be used in selling the bonds to the public, will wish to indicate the financial condition of the company after, rather than before, the financing. An accountant will probably be asked to apply the financing to his most recent audited balance sheet of the company, possibly that of December 31, 1933. Assuming that $75,000.00 of the proceeds of the financing is to be used in liquidating notes payable, the accountant's working papers may be similar to those shown on page 405. The balance sheet giving effect to the financing

(sometimes called a "pro forma balance sheet") will embody the figures in the last column of the working papers.

COMPANY *A*
Working Papers for Balance Sheet Giving Effect to Financing
As of December 31, 1933

	Before Financing	Financing Adjustments Debit	Financing Adjustments Credit	After Financing
Assets				
Current Assets.				
Cash	4,000	95,000(a)	75,000(b)	24,000
Accounts Receivable	75,000			75,000
Inventory	125,000			125,000
Fixed Assets				
Land and Buildings	150,000			150,000
Machinery and Equipment	90,000			90,000
Deferred Charges				
Unexpired Insurance	2,000			2,000
Bond Discount		5,000(a)		5,000
	446,000			471,000
Liabilities and Net Worth				
Current Liabilities.				
Accounts Payable	50,000			50,000
Notes Payable	75,000	75,000(b)		
Fixed Liabilities.				
6% Bonds Payable			100,000(a)	100,000
Net Worth				
Capital Stock	250,000			250,000
Surplus	71,000			71,000
	446,000	175,000	175,000	471,000

Propriety of "giving effect" statements.—A "giving effect" balance sheet portrays a financial condition which never, in fact, exists, because the balance sheet at a stated date is adjusted to give effect to certain transactions which may have occurred at a subsequent date (such as a consummated issuance of securities), or to transactions which are only in prospect (such as the proposed purchase of securities by an investment banker in accordance with a contract, and the application of the proceeds as forecast by the management of the issuing company) Is an accountant justified in issuing and certifying to such a balance sheet?

It is usually regarded as permissible for him to do so if: (1) the period between the date of the balance sheet and the date of the financing transaction is not too great—possibly not in excess of three or four months; (2) no other transactions have, in the meantime, materially affected the company's

financial condition; and (3) the financing transaction is definitely determinable and based on a contract between the issuing company and the security underwriters or investment bankers.

The heading of the "giving effect" balance sheet, and the appended certificate, should indicate the nature of the transactions to which effect has been given For instance, the heading of the balance sheet might read somewhat as follows·

THE *X Y* COMPANY

Balance Sheet—December 31, 1934

Giving effect as of that date to the proposed issuance of $1,000,000 00 of first mortgage bonds, and the application of the proceeds to the retirement of preferred stock and to an increase in working capital

And the accompanying certificate might read somewhat as follows

We have audited the accounts of The *X Y* Company as of December 31, 1934, and have examined a contract providing for the issuance of $1,000,000 00 of first mortgage bonds

We Hereby Certify that, in our opinion, the foregoing balance sheet fairly reflects the financial condition of the company on December 31, 1934, after giving effect as of that date to the proposed issuance of the above-described bonds, and to the application of the proceeds thereof in retiring preferred stock and increasing the working capital

CHAPTER 52

FOREIGN EXCHANGE

Scope of discussion.—Foreign exchange is of interest and importance to:

Banks and brokers dealing in foreign exchange.

Business concerns exporting or importing merchandise, holding foreign investments, operating foreign branches or subsidiaries, or engaging in other activities involving receipts from, or remittances to, other countries.

The accounting problems and procedures of foreign-exchange brokers and of banks maintaining foreign-exchange departments constitute a specialized field to which a book dealing with the general field of accounting may properly give only incidental consideration.

At the time of writing these chapters (May 1934), foreign exchange is in a chaotic and somewhat uncertain condition. Most of the major countries of the world are "off the gold standard." Although their monetary systems are still actually or theoretically based on coins containing gold of a legally established weight and fineness, they have suspended their obligation to sell gold at the legal monetary par or to redeem their paper money in gold at par, or have placed embargoes or governmental limitations upon gold shipments. As a result of these and other conditions, current foreign exchange rates bear strange relationships to par.

Moreover, the United States has recently changed the gold content of its dollar. The gold dollar formerly contained 25.8 troy grains of metal, of which nine tenths was gold and one tenth was alloy introduced to harden the coin and give it durability; the pure gold content of the dollar was therefore nine tenths of 25.8 grains, or 23.22 grains. The present theoretical gold dollar, as established by the Presidential proclamation of January 31, 1934, contains $15\frac{5}{21}$ grains of metal, of which nine tenths is gold; the word "theoretical" is used because gold is no longer coined, and

paper money is not redeemable in gold. Moreover, at this writing, it appears that the situation may shortly be further complicated, as there seems to be some prospect of supporting the currency by reserves consisting of silver as well as gold.

Foreign money; par rates.—Coinages are based on actual or theoretical monetary units containing gold (or silver) of a legally established weight and fineness. For example:

	Total Grains	Fraction Fine	Gold Grains
United States dollar			
Prior to January 31, 1934	25.8	$\frac{9}{10}$	23.22
Established by Presidential proclamation of January 31, 1934	$15\frac{5}{21}$	$\frac{9}{10}$	13.7143
British pound sterling	123.274	$\frac{11}{12}$	113.0011

Mint par rates applicable to the coins of two countries, both of which are based on gold, are computed by determining the relative amounts of pure gold in the two coins. The par rate for the pound on the old basis was determined thus.

$$\frac{113.0011}{23.22} = 4.8665$$

The par rate on the new basis is determined as follows:

$$\frac{113.0011}{13.7143} = 8.2397$$

So long as there is no change in the metallic content of the coins of two countries which are both on a gold basis, the mint par rates applicable to their coins will not change. But when the gold content of either coin changes, the par rate changes. For example, the reduction of the gold content of the French franc under the stabilization law of 1928 reduced the par rate for the franc from \$.1930 to \$.0392, and the reduction of the gold content of the dollar in January 1934 increased the par rate of the franc to \$.0663.

If the coin of one country is based on gold, and the coin of another on silver, the mint par rate will fluctuate with changes in the price of silver in terms of gold. The Hong Kong dollar, for instance, contains 416 grains of silver, nine tenths fine, or 374.4 grains of pure silver. To determine the mint par rate applicable to the Hong Kong dollar in terms of the United States dollar at any date, it is necessary to determine the market value, in United States dollars,

of 374 4 grains of silver

The following table shows the par values of the coins of various countries, as estimated by the Director of the Mint and proclaimed by the Secretary of the Treasury, as of October 1, 1933, and April 1, 1934.

Country	Legal Standard	Monetary Unit	Value in Terms of U S Money: October 1, 1933	Value in Terms of U S Money: April 1, 1934
Argentine Republic	Gold	Peso	$0 9648	$1 6335
Austria	Gold	Schilling	1407	2382
Belgium	Gold	Belga	1390	.2354
Bolivia	Gold	Boliviano	3650	6180
Brazil	Gold	Milreis	5462	2025
British Colonies in Australasia and Africa	Gold	Pound Sterling	4 8665	8 2397
British Honduras	Gold	Dollar	1 0000	1 6931
Bulgaria	Gold	Lev	0072	0122
Canada	Gold	Dollar	1 0000	1 6931
Chile	Gold	Peso	1217	2060
China	Silver (Stated values are estimated market values, in gold, of silver content of units)	Yuan, prior to March 1933	2894	3491
		Yuan, established March 3, 1933	2844	3432
		Dollar: Hong Kong, British	2937	3544
		Dollar: Mexican	2958	3570
Colombia	Gold	Peso	9733	1 6480
Costa Rica	Gold	Colon	4653	0 7879
Cuba	Gold	Peso	1 0000	1 6931
Czechoslovakia	Gold	Krone	0296	0502
Denmark	Gold	Krone	2680	4537
Dominican Republic	Gold	Dollar	1 0000	1 6931
Ecuador	Gold	Sucre	2000	3386
Egypt	Gold	Pound (100 piasters)	4 9431	8 3692
Esthonia	Gold	Kroon	2680	4537
Finland	Gold	Markka	0252	0426
France	Gold	Franc	0392	0663
Germany	Gold	Reichsmark	2382	4033
Great Britain	Gold	Pound Sterling	4 8665	8 2397
Greece	Gold	Drachma	0130	0220
Guatemala	Gold	Quetzal	1 0000	1 6931
Haiti	Gold	Gourde	2000	2000
Honduras	Gold	Lempira	5000	8466
Hungary	Gold	Pengo	1749	2961
India (British)	Gold	Rupee	3650	6180
Indo-China	Gold	Piaster	.3918	6633
Italy	Gold	Lira	.0526	0891
Japan	Gold	Yen	4985	8440

Country	Legal Standard	Monetary Unit	Value in Terms of U. S Money: October 1, 1933	Value in Terms of U. S Money: April 1, 1934
Latvia	Gold	Lat	1930	3267
Liberia	Gold	Dollar	1 0000	1 6931
Lithuania	Gold	Litas	1000	.1693
Mexico	Gold	Peso	4985	8440
Netherlands and colonies	Gold	Guilder (Florin)	4020	6806
Newfoundland	Gold	Dollar	1 0000	1 6931
Nicaragua	Gold	Cordoba	1 0000	1 6933
Norway	Gold	Krone	2680	4537
Panama	Gold	Balboa	1 0000	1 6933
Paraguay	Gold	Peso (Argentine)	9648	1 6335
Persia	Gold	Rial	0487	0824
Peru	Gold	Sol	2800	4740
Philippine Islands	Gold	Peso	.5000	8466
Poland	Gold	Zloty	1122	1899
Portugal	Gold	Escudo	0442	0748
Roumania	Gold	Leu	0060	0101
Salvador	Gold	Colon	5000	8466
Siam	Gold	Baht (Tical)	4424	7491
Spain	Gold	Peseta	1930	3267
Straits Settlements	Gold	Dollar	5678	9613
Sweden	Gold	Krona	2680	4537
Switzerland	Gold	Franc	1930	3267
Turkey	Gold	Piaster	0440	0744
Union of Soviet Republics	Gold	Chervonetz		8 7123
Russia	Gold	Ruble	5146	
Uruguay	Gold	Peso	1 0342	1 7511
Venezuela	Gold	Bolivar	1930	3267
Yugoslavia	Gold	Dinar	0176	0298

Conversions at par.—There are two types of conversion problems. Two illustrations of each type are given below, using par rates for conversion purposes.

(1) Converting a foreign value into a domestic value.

Problem: Convert £1,200 8s. 6d. to dollars.

Solution: Reduce shillings and pence to decimals of a pound, and multiply by the dollar value per pound.

Pounds	1,200 000
Shillings 8s = $\frac{8}{20}$ of a pound	.400
Pence 6d = $\frac{1}{2}$ of $\frac{1}{20}$ of a pound	.025
Total	1,200 425
Multiply by	\$8 2397
Dollar value	\$ 9,891 14

Problem: Convert fr.5,000 to dollars.

Solution: Multiply the number of francs by the dollar value per franc.

Francs	. ..	5,000
Multiply by	. . . . .	$ 0663
Dollar value	. .	$331 50

(2) Converting a domestic value to a foreign value.

Problem: Convert $2,000.00 to pounds.

Solution: Divide the number of dollars by the dollar value per pound, and reduce fractions of a pound to shillings and pence.

$$
\begin{aligned}
2{,}000\ 00 - 8\ 2397 &= £242\ 727 \\
&= £242\ 14\ 546s \\
&= £242\ 14s.\ 6d
\end{aligned}
$$

Problem Convert $2,000.00 to francs.

Solution: Divide the number of dollars by the dollar value per franc

$$2{,}000\ 00 - .0663 = \text{fr.}30{,}165\ 91$$

Current rates.—Current exchange rates for cable transfers, drafts, and so forth may be quoted directly or indirectly.

Direct quotations are stated in the domestic currency.

All quotations are now made on this basis in the United States. The rates state the value of the foreign unit in cents (or dollars); for example, the following rates are stated in cents:

For pounds	510 875
For francs	6 61

Paris quotes pounds and dollars directly, the rates state the value of the foreign unit in francs, thus, for example:

For pounds.	77 29
For dollars.	15 129

Indirect quotations are stated in the foreign currency.

London quotes francs and dollars indirectly; that is, in terms of francs and dollars per pound; thus, for example:

For francs:	77 29
For dollars:	5 10875

The relation between direct and indirect quotations may be made clearer by the following summary

	Quotations by		
Between	New York (Direct)	London (Indirect)	Paris (Direct)
New York and London	510.875	5.10875	
New York and Paris	6.61		15.129
London and Paris		77.29	77.29

Current rates differ according to the nature of the exchange, that is, rates for cable transfers are higher than those for checks, and rates for checks are higher than those for time drafts. For simplicity of presentation, however, we shall give only minor consideration to these differences in the following discussion.

Triangular parity; arbitrage.—A close relationship will always exist among the rates quoted in three or more countries for exchange among those countries. For instance, if London quotes dollars at 5.10875 and francs at 77.29, the rates for pounds quoted by New York and Paris will be extremely close to 510.875 and 77.29, respectively.

Moreover, the rate quoted by New York for francs will be close to 6.61 (510.875 ÷ 77.29), and the rate quoted by Paris for dollars will be close to 15.129 (77.29 ÷ 5.10875). To understand why this is so, assume that London quoted dollars at 5.10875 and francs at 77.29 as above, but Paris quoted dollars at 14.75. Dealers in exchange would immediately begin to take profits on arbitrage transactions. For instance, because of the low cost of dollars in Paris, a London banker might:

> With £25,000 buy (25,000 × 77.29) fr 1,932,250
> With fr 1,932,250 buy (1,932,250 ÷ 14.75) \$131,000
> With \$131,000 buy (131,000 ÷ 5.10875) £25,642,

thus making an arbitrage profit of £642. But the demand in Paris for dollars caused by such transactions would quickly raise the rate from 14.75 toward its triangular parity of 15.129.

Fluctuations in current rates.—The following table shows the par rates of five foreign currencies, and current rates prevailing in New York on three stated dates:

	Before Reduction of Gold Content of U S Dollar				After Reduction of Gold Content of U S Dollar	
		Current Rates				Current Rate
	Par Rate	June 20, 1928	Dec 31, 1932	Dec 12, 1933	Par Rate	May 18, 1934
Pounds —Great Britain	486 65	487 50	339 75	510 00	823 97	510 87
Francs —France	3 92	3 93	3 93	6 10	6 63	6 61
Lire —Italy	5 26	5 25	5 10	8 20	8 91	8 52
Marks —Germany	23 82	23 88	23 88	23.79	40 33	39 50
Guilders—Holland	40 20	40 31	40 10	62.80	68 06	67 90

This tabulation of rates suggests several questions. In the first place, what causes the current rates to fluctuate so far from par; for instance, with the par of the pound on the old basis of 486 65, why should the current rate drop as low as 339.75 and rise as high as 510.00? In the second place, why did the change in the par rates not cause a much greater change in the current rates, for instance, why should the current rate for the pound have risen so little between December 12, 1933, and May 18, 1934, although, in the meantime, the par rose from 486.65 to 823 97?

The answer to these questions lies in the following facts: First, the par rates and the current rates apply to two entirely different things

Par rates measure the relative quantities of pure gold in foreign and domestic coins (or the value of the silver in the coin of a country on a silver basis).

Current rates measure the values of intangible rights or claims.

Second, the rights or claims to which current rates are applicable are commodities whose value is determined by supply and demand.

It will therefore be desirable to give some consideration to the nature of these rights or claims, their origin, and the methods used in their settlement.

Intercountry debts and claims.—Foreign exchange procedure is a method of effecting settlements between debtors and creditors in different countries, and current rates of foreign exchange are affected by the amounts of intercountry

debts and claims that must be settled currently. Some of the most important sources of currently collectible intercountry claims are mentioned below:

(1) Exports and imports of merchandise.
(2) Purchases, sales, and flotations of securities in foreign countries. Such transactions create currently collectible claims against the purchasers of the securities. At the same time, of course, intercountry claims are created against the foreign issuers of the securities, but these are not currently due and collectible, and hence do not affect the current exchange rates.
(3) Interest and dividends on intercountry holdings of securities.
(4) Matured bonds and other long-term obligations held abroad, or periodical sinking fund deposits required to be made abroad.
(5) Expenditures of tourists.
(6) Short-term intercountry loans. Because of the frequent differences in interest rates in different countries, short-term loans are continually being made in, and repaid from, foreign countries.
(7) Services, such as ocean shipping, insurance, and international banking.
(8) Current installments payable on the intergovernmental debts which arose during and immediately after the World War.
(9) Short-term loans made by one government to another.
(10) Current installments payable on reparations.

A country is said to enjoy a favorable balance if its claims receivable exceed its claims payable. Its balance is unfavorable if its claims payable exceed its claims receivable.

Settlements by exchange of claims.—It is not customary, except in infrequent instances, to liquidate foreign debts by the actual shipment of gold. Such a procedure would be too expensive. Instead, intercountry debts are settled by a system which is virtually an exchange of claims and is known as foreign exchange. Using, for the time being, the present

par value of the pound, 823.97, let us suppose that·

X, a London importer, buys goods from *A*, a Chicago manufacturer, for $8,239 70, and that
Y, a London manufacturer, sells goods to *B*, a Chicago importer, for £1,000

If these two claims were settled by actual shipments of gold, the shipments would be made as follows.

$$\begin{array}{ccc} \underline{\text{London}} & & \underline{\text{Chicago}} \\ X & \xrightarrow{\hspace{8em}} & A \\ Y & \xleftarrow{\hspace{8em}} & B \end{array}$$

But such a procedure would involve two expensive shipments of equal amounts of gold. If the necessary arrangements could be made by the four parties, the two debts, since they are of equal amounts, might be settled by an exchange of claims and by payments in London and Chicago as follows:

$$\begin{array}{ccc} \underline{\text{London}} & \qquad & \underline{\text{Chicago}} \\ X & & A \\ \Big\downarrow & & \Big\uparrow \\ Y & & B \end{array}$$

Y receives his money from *X* instead of from *B*, and *A* receives his money from *B* instead of from *X*. But such a method of settlement would be virtually impossible if *X* and *Y*, in London, and *A* and *B*, in Chicago, were obliged to find each other and personally arrange the exchange of claims. To simplify the exchange procedure, the claims are put into the form of bills of exchange and other commercial paper, and foreign exchange brokers and bankers serve as a clearing house for the exchange of these claims.

To illustrate how the two claims might be settled by customary foreign exchange procedures (ignoring, for the time being, the difference between par and current rates and the bankers' profits), let us assume the following chain of events.

A, in Chicago, who has a claim of $8,239.70 against *X*, in London, draws a sight draft for that amount on *X* and sells it to a

Chicago bank. (*A* has now received the money for his goods)

The Chicago bank sends the draft to a London bank for collection; the London bank collects from *X* its sterling equivalent, £1,000, and credits this amount to the Chicago bank

B, in Chicago, who wishes to pay £1,000 to *Y*, in London, buys from the Chicago bank a £1,000 draft drawn by the Chicago bank against its London deposit, and mails this draft to *Y* (*B* has now paid his indebtedness.)

X, in London, pays his debt to *A* when he pays the London bank the amount of *A*'s sight draft.

Y, in London, collects the amount of his claim against *B* when he collects from the London bank the draft drawn on it by the Chicago bank

By this series of transactions, the Chicago bank receives \$8,239.70 from *B* and pays it to *A*; and the London bank receives £1,000 from *X* and pays it to *Y*. Thus, instead of the theoretically possible, but practically impossible, offsets represented by the preceding diagram

$$\begin{tikzcd} \underline{\text{London}} & \underline{\text{Chicago}} \\ X \arrow[d] & A \\ Y & B \arrow[u] \end{tikzcd}$$

we find a perfectly practicable method of effecting offsets, as represented by the following diagram:

$$\begin{tikzcd} \underline{\text{London}} & \underline{\text{Chicago}} \\ X \arrow[d] & A \\ \text{London bank} \arrow[d] & \text{Chicago bank} \arrow[u] \\ Y & B \arrow[u] \end{tikzcd}$$

In this illustration it was assumed that the two intercountry claims were equal in amount. One of the essential features of the service of the foreign exchange bankers is their

willingness to buy good commercial paper of any amount from any responsible holder, and to sell their own drafts in any amount. It was also assumed that the settlement was effected by the use of a sight draft and a banker's draft. Other forms of exchange may be used.

Cable transfers.—A cable transfer is an order, transmitted by cable, usually upon a bank, to pay a certain sum of money to a designated beneficiary. In a sense, therefore, a cable transfer is a draft. Thus, if *D* in New York must remit £1,000 to *E* in London, *D* may purchase a draft drawn by a New York bank on its London correspondent and mail this draft to *E*; or *D* may purchase from his bank a cable transfer which will order the London bank to pay £1,000 to *E*. The effect of the two methods is identical except for the time required to make the payment and the somewhat higher price which will probably be charged by the bank for the cable transfer.

Bills of exchange.—A bill of exchange is an unconditional order in writing, addressed by one person to another, to pay to a designated person or to his order, a sum certain in money on demand or at a fixed or determinable future time. Bills of exchange may be classified as:

- Banker's bills, drawn by a bank or banker upon another bank or banker, such bills, as used in foreign exchange, are comparable to the bank drafts used in domestic exchange.
- Commercial bills, drawn by a merchant on another merchant or a bank, or drawn by a bank on a merchant.

Bills of exchange may be classified according to the time when payment is ordered, as follows:

- Sight bills, payable upon presentation.
- Time bills, which may be further classified as:
  - Short bills, drawn for less than thirty days after sight.
  - Long bills, drawn for thirty or more days after sight

Bills of exchange may also be classified with respect to any attached security, as follows:

- Clean bills, drawn against deposits or previously arranged credits, and without any documents or collateral attached
- Secured or documentary bills, to which are attached documents serving as collateral to the bills.
  - For instance, if an American has sold stocks or bonds to a foreign purchaser, the securities sold may be attached to a bill drawn on the purchaser; the securities serve as collateral to the bill until it is paid or accepted by the foreign purchaser, when they are detached and delivered to him. If the bill is drawn for collection of a debt arising from a sale of merchandise, the attached documents will include a bill of lading, consular invoice, seller's invoice, insurance certificate, and so forth.
  - Secured or documentary bills may be further classified according to the requirements for the release of the documents, as follows:
    - Documentary acceptance bills. The documents accompanying such a bill are released to the drawee immediately upon his acceptance of the bill, which thereupon becomes a clean bill.
    - Documentary payment bills. The documents accompanying such a bill are not released to the drawee until the bill is paid.

Letters of credit.—A letter of credit is an instrument addressed by the issuing bank to all or some of its foreign correspondents, introducing the holder, certifying that he is authorized to draw a stated aggregate sum of money, and requesting that his drafts be honored up to that amount. It is used by travelers for the payment of expenses and sometimes for the financing of purchases. To obtain funds, the holder of such a letter presents it and the accompanying letter of identification to a named correspondent bank, and draws a draft against the letter. The paying bank indorses the amount of the draft on the letter, to show how much of the credit has been utilized, and sends the draft to the issuing bank for credit. The issuing bank may receive its payment for the letter of credit either at the time of its issuance or after the payment of the drafts drawn against it

How debts are paid.—Now that we are familiar with some of the documents used in foreign exchange, let us assume that N, a New York exporter, sells goods to L, a London importer, and consider some of the ways by which the debt may be paid by L to N. Payment by L in dollars from the proceeds of a letter of credit requires no consideration; so far as N is concerned, the transaction does not differ from a sale to a domestic customer.

N will usually bill in dollars, to eliminate risks arising from exchange fluctuations. If he bills in pounds, he may bill at the pound equivalent of his dollar price at the rate current at the date of billing. A rise or fall in the exchange rate between the date of billing and the date of settlement will mean a gain or a loss to N, unless he hedges by the method described under the subsequent caption "Futures."

For purposes of the following illustrations we shall use the current rate as of May 18, 1934, or 510.87, and shall assume that, in the illustrations based on dollar billing, the goods were billed at $5,108.70, and that, in the illustrations based on pound billing, the goods were billed at £1,000.

(I) *Goods billed in dollars and documents drawn in dollars.*

(1) L may make the payment by purchasing from his London bank a cable transfer for $5,108.70, payable to N.

(2) L may perhaps maintain a deposit in a New York bank, and thus be in a position to send N his personal check on the New York bank, drawn in dollars This procedure would be unusual, except perhaps in the case of very large importers.

(3) L may obtain and send to N a draft for $5,108.70, drawn by a London bank against its New York correspondent.

(4) L may have established a credit arrangement with a New York bank which will pay sight drafts or accept time drafts drawn against it. N may then draw a draft for $5,108.70 on the New York bank, attach the shipping documents thereto, and present the draft to the New York bank for:

(a) Payment, if it is a sight draft; in this case N will obtain the $5,108.70 immediately.

(b) Acceptance, if it is a time draft; in this case N cannot obtain the entire \$5,108 70 immediately, but can obtain only the proceeds by selling the draft at a net price after deducting the discount to maturity.

(II) Goods billed in pounds and documents drawn in pounds:

(5) L may send N his personal check for £1,000 against his London bank.

(6) L may send a draft drawn by a London bank against a London bank.

By methods 5 and 6, N will receive a check or draft for £1,000, which he will present to his New York bank, and for which he will receive the dollar equivalent computed at the current exchange rate. The New York bank will forward the check or draft to its London correspondent for credit.

(7) L may have established a credit arrangement with a London bank by which that bank will pay sight drafts or accept time drafts drawn against it. N may then draw a draft on this London bank for £1,000, attach the shipping documents thereto, sell the draft to a New York bank, and receive the proceeds computed at the current exchange rate. The New York bank will send the draft and the attached documents to its London correspondent.

In London, the draft will be presented to the drawee bank for:

(a) Payment, if it is a sight draft.

(b) Acceptance, if it is a time draft.

(8) N may draw on L a sight draft or a time draft for £1,000, attach the shipping documents thereto, and sell the draft to his New York bank for its dollar value at the current rate. The New York bank will send the draft to its London correspondent.

In London, the draft will be presented to L for:

(a) Payment, if it is a sight draft

(b) Acceptance, if it is a time draft.

Relative desirability of methods.—Which of the methods described in the foregoing section will the New York exporter

of merchandise prefer? Naturally, he will prefer the methods by which he will obtain his money:

(A) Without danger of loss from fluctuations in exchange rates.
For this reason he will prefer methods 1, 2, 3, and 4, in which billings are made in dollars, and the hazards of exchange loss are thrown upon the foreign purchaser.

(B) Immediately upon shipment of the merchandise
For this reason he will prefer method 4, in which he draws a draft on a New York bank. He *may* receive his money promptly by methods 1, 2, and 3, but that will depend upon the promptness of the foreign importer in making his remittance.

(C) Without loss of discount.
For this reason he will prefer method 4a (sight draft) to method 4b (time draft).

It is evident, therefore, that the method of settlement most satisfactory to the New York exporter, and the one which will probably induce him to quote the best price for his merchandise, is the method (4a) under which he draws a dollar sight draft, at the date of shipment, on a New York banker against a credit arranged by the foreign purchaser.

Discount on time drafts.—Let us return to the illustration in which N, in New York, drew a time bill on L in London, or on a bank in London which stood ready to accept the bill for L's account, and consider the subsequent history of the bill and the factors which will determine the amount of discount that N will be obliged to suffer in disposing of it.

The New York bank, after purchasing the bill, will send it to a London bank, which will obtain acceptance from L or L's bank, and will discount the bill and credit the New York bank with the proceeds. In a money market such as London, there are always enormous quantities of liquid bank capital seeking investment in such paper by purchasing it at its discounted value. The ultimate holder of the acceptance, which may be discounted and rediscounted several times before its maturity, will present it to the drawee (L or L's bank) at maturity for payment.

The amount that N will receive from the New York bank which purchases the draft will depend upon the amount of discount which the New York bank expects will be suffered upon the sale of the draft in London. What factors will determine the amount of this discount?

(1) The discount rate prevailing in the London discount market, which, in turn, will be affected by the rediscount rate quoted by the Bank of England.
(2) The quality of the paper, as determined by the credit standing of the drawer and the drawee. The New York bank will be obliged to indorse the draft when it transfers the paper to its London correspondent, the London bank's indorsement will be required when the draft is resold in the open discount market; both banks will thus incur contingent liabilities which will continue until the maturity of the paper. Obviously, a higher price will be paid for prime paper than for paper which may not be collected. For this reason, N will prefer a draft drawn on L's bank to a draft drawn on L.
(3) The possibility of any serious financial disturbance in the market where the bill is payable, which may interfere with the prompt payment of the bill at maturity.
(4) The usance of the bill, or the time it is to run This factor, of course, would affect the amount of discount even if there were no risk involved, but it also affects the risk, for the longer the period during which the fate of the bill will be unknown, the greater the risk undertaken as an incident to the indorsement, and the greater the spread which the purchaser of the bill will demand for incurring the risk.

Fluctuations in current exchange rates.—Current exchange rates vary from day to day as the result of changes in the supply of and demand for foreign bills. To understand why this is so, let us put ourselves in the position of a New York foreign exchange banker with a correspondent in London. We buy drafts and other forms of exchange payable in pounds, and send them to our correspondent for credit;

against this credit we sell drafts or other forms of exchange payable in pounds. We are dealing in a commodity called pounds, and our account with our foreign correspondent becomes the storehouse for this commodity. The supply of the commodity is furnished by those who hold receivables collectible in pounds; the demand is created by those who owe debts which must be paid in pounds. If the supply is greater than the demand, the price will be low, or below par. If the demand is greater than the supply, the price will be high, or above par.

The demand for and the supply of foreign exchange between two countries are affected by the relative volumes of intercountry transactions such as those mentioned earlier in the chapter under the caption "Intercountry debts and claims." They are also affected by transactions involving debtors and creditors in other countries. For instance, an American exporter, shipping goods to China, may be paid by a draft on a London bank. Or a French banker with a larger dollar balance in New York than he desires, and with a smaller pound balance in London than he desires, may use his dollar balance to buy pounds in New York and direct that they be transferred to his London correspondent, to increase his pound balance in London.

Reciprocal nature of exchange rates.—Let us assume that, for some reason, the requirements for transfers of funds from London to New York exceed the requirements for transfers of funds from New York to London.

In New York:
 The supply of exchange (transfers from London) will exceed the demand (transfers from New York); exchange on London will be quoted in New York at less than par—say at 510.87.

In London.
 The demand for exchange (transfers from London) will exceed the supply (transfers from New York); exchange on New York will be quoted in London at more than par—probably at or very close to 5.1087.

But how can a change from par (8.2397) to 5.1087 represent a fall in the price of exchange in New York and a rise in

the price of exchange in London? The answer is: 510.87 is a direct quotation in New York and an indirect quotation in London. In New York a pound draft can be purchased for \$5 1087 instead of for \$8.2397, clearly London exchange is at a discount in New York. In London £1 will not buy a draft for \$8.2397; it will buy only \$5.1087, from the London viewpoint, exchange is at a premium.

Gold or specie points.—If no governmental restriction exists with respect to the shipment of gold, exchange rates will not usually rise or fall beyond certain levels known as the gold or specie points. These points vary from time to time, and of course are affected by any change in the par rate; they are determined by the cost of exporting and importing gold, which includes freight, marine insurance, assay office charges if the gold is shipped in bars, abrasion if the gold is shipped in coins, and loss of interest The gold points are immediately abolished, however, by a governmental prohibition upon the shipment of gold.

"Off the gold standard."—A country is on the gold standard so long as its government stands ready to redeem all of its obligations in gold, upon demand and without restriction. It is off the gold standard as soon as such redemption is discontinued.

To keep itself in a position to redeem its notes in gold on demand, a government must maintain adequate gold reserves, but its reserves may be depleted if subjected to the drain of gold exportations resulting from unfavorable exchange rates, or to the drain created by domestic hoarders of gold. When a government faces a dangerous depletion of its gold reserves, it may place a restriction on gold exports, while continuing the redemption of its notes in gold; from a domestic standpoint it may still be regarded as on the gold standard, but it is off the gold standard from an international standpoint. If it also ceases the gold redemption of all its domestic obligations, it is completely off the gold standard.

What happens to exchange rates when a country goes off the gold standard? Embargoes upon the exportation or importation of gold between two countries abolish the gold points, and thus permit unlimited rises or falls in the

exchange rates. In this connection it will be interesting to note the quotations for pounds at three dates, as shown on page 413.

June 20, 1928	487 50
Dec 31, 1932	339 75
Dec 12, 1933	510 00

On June 20, 1928, Great Britain and the United States were both on the gold standard, and the rate was within the gold points. On December 31, 1932, Great Britain was off the gold standard, gold could not be imported from Great Britain, the import gold point (approximately 482.75) was inoperative, and the rate fell to 339.75. On December 12, 1933, the United States was also off the gold standard, gold could not be exported, the export gold point (approximately 489 05) was no longer operative, and the rate rose to 510.00.

Thus it appears that, after the gold points have been abolished by embargoes on the export or import of gold, the supply of and demand for drafts and other forms of exchange exercise an unrestricted influence on the current rates. But other influences may also affect the rates. After a country prohibits the exportation of gold, drafts drawn on debtors in that country are, in the last analysis, payable in paper money, if the country issues large quantities of non-convertible paper money (as Germany and France did after the War), its paper money will depreciate, and drafts payable in such currency will correspondingly depreciate; in other words, exchange rates on such a country will fall.

After a country has gone off the gold standard, its government may undertake, by various methods, to maintain some stability in its exchange rates. Any tendency of rates to rise, because the demand for exchange (to pay for imports and so forth) exceeds the supply (obtained in collection for exports and so forth), may be curbed by placing quota limitations on imports, and by stimulating exports. Or the purchase and sale of drafts and other forms of exchange may be taken out of the hands of the ordinary commercial agencies and placed under governmental control, so that competitive prices may be eliminated and fixed prices established. Or the available supply of exchange may be rationed; this will tend to restrict importations, because a prospective importer is not

likely to make commitments unless he knows in advance that he will be able to obtain the necessary exchange to make the payment. Or accounts may be "blocked," which means that foreign bankers and others are not able to draw upon their balances.

But a rise in exchange rates tends to stimulate exports, and thus automatically to reduce the rates by increasing the supply of exchange. How does a rise in the exchange rates stimulate exports? Let us place ourselves in the position of an American manufacturer attempting to compete with a British manufacturer for export business. Our British competitor quotes an article for £100; a similar quotation by us on December 31, 1932, would have netted us $339.75. A quotation of £100 on December 12, 1933, when we were off the gold standard, would have netted us $510.00. Assume that we must have $400.00 to make a profit on our merchandise. On December 31, 1932, we could not have met the competition. On December 12, 1933, we could have quoted approximately £80. Going off the gold standard put us in a better position to meet world competition for foreign trade. To the extent that a country's exports are thus increased, its supply of exchange on other countries is increased; and the increase in the supply of exchange tends to reduce the rates.

The rise in exchange rates resulting from going off the gold standard is not, however, wholly advantageous. While exporters may benefit, importers suffer. Moreover, the general condition of instability is undesirable.

Futures.—In the discussion of the various methods of making intercountry payments, it was noted that each party to an intercountry transaction will usually prefer to have the billing in his own currency, since the hazard of exchange fluctuations will thus be thrown upon the other party to the transaction. If billings are made in the foreign currency, purchases or sales of futures, or forward exchange, may be made as an insurance against fluctuations in the exchange rate.

For example, a New York exporter sells goods billed at £1,000, due sixty days hence; he does not know what rate will prevail when he receives the draft, and consequently he does not know whether he will make a profit or suffer a loss on the fluctuation in the exchange rate during the sixty days.

But he can eliminate the chance of profit or the hazard of loss by selling £1,000 due sixty days hence; or, in other words, by contracting to deliver £1,000 in sixty days at a price now determined. This sale of a future, in effect, establishes the dollar value of the £1,000 draft which he is entitled to receive from his debtor at the expiration of the credit period.

On the other hand, a New York importer who purchases goods billed at £1,000, payable in sixty days, can eliminate the element of speculative profit or loss on exchange rate fluctuations by immediately purchasing £1,000 deliverable to him at the end of sixty days, when he will need the exchange for the payment of the imported merchandise.

Conversions at current rates.—The arithmetical procedure for making conversions at current rates does not differ from that discussed under the preceding caption of "Conversions at par." To illustrate:

Problem: What will be the cost of a draft for £15,000 at 5.10?

Solution $5.10 × 15,000 = $76,500.00, the cost in dollars

Problem: How many pounds can be purchased for $25,000.00 at a rate of 5 10?

Solution: 25,000 ÷ 5.10 = 4,901.96 pounds obtainable
= £4,901 19s. 2d.

Interest on foreign money.—While short methods are available for those who are thoroughly familiar with foreign coinage, it is hardly worth while to learn these short methods if interest computations are to be made only occasionally. Two methods are available, both of which are illustrated by the following example:

What is the interest on £310 10s. 6d for 90 days at 6%?

First solution Reduce the shillings and pence to decimals of a pound.
Compute the interest in pounds and decimals.
Reduce the result to pounds, shillings, and pence.

Pounds	£310 000
Shillings 10s = ½ pound	500
Pence 6d = ½ of 1/20 of a pound	025
Total .	£310 525
Interest for 60 days (point off two places)	£ 3 10525
Int for 30 days (one half thereof) .	1 552625
Interest for 90 days	£ 4 657875

20 (shillings per pound) x 657875 = 13 1575, number of shillings
12 (pence per shilling) x 1575 = 1 89, number of pence
Interest = £4 13s 2d

Second solution: Reduce pounds and shillings to pence.
Compute the interest in terms of pence.
Reduce to pounds, shillings, and pence.

Number of pounds .		310
Multiply by number of shillings per pound		20
Pounds reduced to shillings		6,200
Add shillings		10
Total . .		6,210
Multiply by number of pence per shilling		12
Pounds and shillings reduced to pence		74,520
Add pence . .		6
Total pence .		74,526
Interest for 60 days. ..	745 26d	
Interest for 30 days	372 63d	
Interest for 90 days . .	1,117 89d	

1,118 − 12 = 93, with a remainder of 2, or 93 shillings, 2 pence
93 − 20 = 4, with a remainder of 13, or 4 pounds, 13 shillings
Total interest = £4 13s 2d

Bank's accounts with foreign correspondents.—A bank's accounts with its foreign correspondents are of two classes.

Vostro accounts, or accounts due to foreign banks and bankers.
These accounts show the dollar balances maintained *by* foreign banks and bankers. They are credited with deposits received in dollars, and are charged with dollar drafts, and so forth, drawn by the foreign depositors against these deposits

Nostro accounts, or accounts due from foreign banks and bankers.

These accounts show the pound, franc, or other balances maintained *with* foreign banks and bankers. They are charged with deposits made with foreign correspondents, and are credited with items payable out of these deposits.

To illustrate the use of these accounts, assume that the *L* Bank of London and the *N* Bank of New York are correspondents.

All exchange transactions conducted between the two banks in dollars will be recorded in the.

Vostro ledger of the New York bank, in an account with *L* Bank—London, and in the
Nostro ledger of the London bank, in a reciprocal account with *N* Bank—New York.

All exchange transactions conducted between the two banks in pounds will be recorded in the·

Vostro ledger of the London bank, in an account with *N* Bank—New York, and in the
Nostro ledger of the New York bank, in a reciprocal account with *L* Bank—London.

The vostro accounts are kept in the domestic currency only, and are similar to the accounts of domestic depositors.

The nostro accounts are kept in both currencies, but the foreign currency columns are merely memorandum columns like the quantity columns in a perpetual inventory account. The general procedure of keeping the nostro accounts and the method of closing them to determine the profit or loss, may be illustrated by the following account. The debits for drafts and other forms of pound exchange purchased and sent abroad for deposit, and the credits for drafts and other forms of pound exchange sold, are condensed into one entry each, for simplicity.

Name of Foreign Bank

	£	$		£	$
Purchases	5,000-0-0	25,450 00	Sales	3,000-0-0	15,360 00
Exchange		110 00	Balance	2,000-0-0	10,200 00
	5,000-0-0	25,560 00		5,000-0-0	25,560 00
Balance down	2,000-0-0	10,200 00			

The account shows total purchases of £5,000 at a total cost of $25,450.00, and total sales of £3,000 for $15,360.00. The profit or loss on the foreign exchange trading may be computed daily or less frequently. To determine the profit or loss, the balance (£2,000) shown by the foreign amount columns is computed and entered in the foreign amount column. The foreign balance is then converted into dollars, at the rate current at the close of the day's business, and the dollar balance ($10,200.00) thus ascertained is entered in the dollar amount column. In the illustration, the £2,000 balance was converted at 5.10. After these figures are entered in the proper columns, the foreign amount columns balance, but the dollar amount columns do not balance. To balance the dollar columns, a journal entry is made in dollars, debiting the account and crediting Exchange for the profit ($110.00) shown by the account, or crediting the account and debiting Exchange for the loss.

CHAPTER 53

FOREIGN EXCHANGE (Continued)

Foreign purchases.—An American importer, buying goods abroad, may be billed in dollars or in the foreign currency. If the American importer is billed in dollars, the foreign exporter will make the gain or bear the loss resulting from any fluctuation in exchange rates between the date of purchase and the date of settlement. For if an American importer purchases goods billed to him at $1,000.00, no fluctuation in exchange can cause him to remit more or less than $1,000.00 in settlement; any fluctuations in exchange rates will affect the amount of foreign money which the exporter will obtain for the $1,000 00 draft.

But if the importer is billed in terms of foreign currency, the fluctuations in exchange rates will affect the settlement. To illustrate, assume that a Chicago merchant purchases an invoice of goods billed to him at £1,000. The rate at the date of purchase is 5.12. The entry for the purchase will be:

Purchases	$5,120 00	
London Manufacturer		$5,120 00

When the entry is posted to the London manufacturer's account, a notation will have to be made of the amount of the bill in pounds, or the account may be kept with pound and dollar columns on both sides

If, at the date of settlement, the rate is 5.10, a draft for £1,000 will cost $5,100.00, and the entry to record the settlement will be:

London Manufacturer	$5,120 00	
Cash		$5,100 00
Exchange (or Purchases)		20 00

On the other hand, if the rate at the date of settlement is 5.15, the entry to record the settlement will be:

London Manufacturer	$5,120 00	
Exchange (or Purchases)	30.00	
Cash		$5,150 00

If the Chicago merchant desires to protect himself against speculative risks from exchange fluctuations, he may, at the time of purchasing the goods, buy future exchange on London, the delivery of the future to be made to him at the date when he will require it for the settlement of his invoice.

Foreign sales.—An American, selling goods abroad, may bill in dollars or in foreign currency. If the American bills in dollars, the foreign purchaser will make the gain or bear the loss resulting from any exchange fluctuation. If the American bills in the foreign currency, he will make the gain or bear the loss. To illustrate, assume that a Chicago manufacturer sells a bill of goods to a London merchant for £1,000. The rate at the date of sale is 5.12, and the sale is recorded as follows:

London Merchant	$5,120 00	
Sales		$5,120 00

A memorandum of the pound amount must be made in the London merchant's account on the Chicago manufacturer's books, or this account may be kept in both pounds and dollars.

If the rate is 5.15 when the Chicago manufacturer receives the London merchant's draft for £1,000, the Chicago merchant's bank will pay $5,150.00 for the draft, and the entry will be:

Cash	$5,150 00	
London Merchant		$5,120 00
Exchange (or Sales)		30 00

If the rate at settlement time is 5.10, the entry will be:

Cash	$5,100 00	
Exchange (or Sales)	20 00	
London Merchant		$5,120 00

If the Chicago merchant who sells goods and bills them in pounds, wishes to protect himself against exchange fluctuations, he may sell future exchange on London for £1,000 for delivery at the date when he expects to receive the draft for £1,000.

Foreign branches.—The methods of accounting for foreign branches are similar to the methods described in the chapter

on domestic branches, but the problem is complicated by the fact that the home office books are kept in terms of the domestic currency whereas the branch books are kept in terms of the foreign currency. This complication is faced:

(1) During the accounting period when:
    (a) Cash or merchandise is transferred from the home office to the branch, or vice versa, or when,
    (b) Any transaction which is recorded in one currency on one set of books must also be recorded at an equivalent value in the other currency on the other set of books.
(2) At the end of the period when
    (a) The branch profit, computed on the branch books in the foreign currency, must be recomputed in the domestic currency and taken up on the home office books; and when
    (b) The branch profit and loss statement must be combined with the home office profit and loss statement, and when
    (c) The branch balance sheet must be combined with the home office balance sheet.

Some of the features peculiar to foreign branch accounting may be explained by carrying an illustration through the following steps

(1) Entries for transactions of the period.
(2) Closing the branch books, and preparing branch statements in foreign currency.
(3) Conversion of branch trial balance, to obtain dollar values to be used in.
    (a) Branch profit and loss statement expressed in dollars, thus determining the net profit to be taken up by the home office.
    (b) Branch balance sheet expressed in dollars.

Illustration.—The following transactions form the basis of the illustration.

(1) The home office, in Chicago, opens a London branch, sending it a draft for £1,000, which the home office pur-

chases when the rate is 5 18

(2) The home office sends the branch a draft for \$2,600 00 When the branch receives this draft and deposits it, the rate is 5.20; the London bank therefore credits the branch with £500.

(3) The home office sends to the branch goods valued at \$51,900.00, which is cost The shipment is made when the exchange rate is 5.19, and the goods are therefore taken up on the branch books at £10,000

(4) Purchases on account, made by the branch in England, £3,000.

(5) Payments made to creditors on account of above purchases, £2,500.

(6) Sales on account, £16,000.

(7) Collections on account, £15,000.

(8) Expenses paid, £2,000

(9) The branch sends the home office a draft for £5,000, which the home office sells at 5 21, realizing \$26,050 00

(10) The branch sends the home office a draft for \$31,140.00, which it purchased at 5 19, the cost being £6,000.

The branch inventory at the end of the year is valued at £2,000.

Entries during the period.—Entries for transactions which are recorded only on the branch books present no new features and no difficulties. Reference to the illustrative entries on page 435 will show that transactions 4, 5, 6, 7, and 8, which appear on the branch books only, are recorded in the manner described in the chapter on domestic branches; the entries are recorded in the foreign currency only and the problem of conversion to domestic currency does not arise.

When cash is sent from the home office to the branch, the home office records the dollar cost of the remittance, and the branch records the pounds received. In transaction 1, the home office buys a £1,000 draft for 5.18. The cost is therefore \$5,180.00, and the remittance is recorded on the home office books at this figure and taken up on the branch books at £1,000. In transaction 2, the home office sends a draft for \$2,600.00, and the branch records the receipt of the funds at the number of pounds received when the draft is deposited. Thus, in the first transaction, the rate at the date of purchase governs the conversion; whereas, in the second transaction, the rate at the date of deposit by the branch governs the conversion.

	Branch Books			Home Office Books		
(1)	Cash	£ 1,000		Remittances to Branch	$ 5,180	
	Remittances from Home Office		£ 1,000	Cash		$ 5,180
(2)	Cash	500		Remittances to Branch	2,600	
	Remittances from Home Office		500	Cash		2,600
(3)	Merchandise from Home Office	10,000		Branch Current	51,900	
	Home Office Current		10,000	Shipments to Branch		51,900
(4)	Purchases	3,000				
	Accounts Payable		3,000			
(5)	Accounts Payable	2,500				
	Cash		2,500			
(6)	Accounts Receivable	16,000				
	Sales		16,000			
(7)	Cash	15,000				
	Accounts Receivable		15,000			
(8)	Expense	2,000				
	Cash		2,000			
(9)	Remittances to Home Office	5,000		Cash	26,050	
	Cash		5,000	Remittances from Branch		26,050
(10)	Remittances to Home Office	6,000		Cash	31,140	
	Cash		6,000	Remittances from Branch		31,140

It should be noted that, in the illustrative entries, the home office debits Remittances to Branch, instead of debiting the Branch Current account; and the branch credits Remittances from Home Office, instead of crediting the Home Office Current account. These entries are made so that

reciprocal accounts on the two books will show the value, in dollars and in pounds, of funds sent from the home office to the branch. These reciprocal accounts will be found useful when the branch trial balance is converted into domestic currency at the end of the period.

The goods sent by the home office to the branch (transaction 3) are credited by the home office to Shipments to Branch at cost, and are taken up on the branch books at the current exchange value at the date of shipment.

Cash remittances from the branch to the home office are illustrated by the last two transactions In 9, the branch buys a £5,000 draft, and the dollar value is determined when the home office sells it. In 10, the branch buys a draft for $31,140.00, paying for it at the rate of 5.19, the pound and dollar values both being known at the date of purchase. It should be noted that the branch charges Remittances to Home Office instead of the Home Office Current account, and the home office credits Remittances from Branch instead of Branch Current, for the purpose of providing reciprocal accounts showing the dollar and pound values of the remittances.

Branch closing and statements.—At the close of the accounting period, the branch draws off the following trial balance

Cash	£ 1,000	
Accounts Receivable	1,000	
Remittances to Home Office	11,000	
Accounts Payable		£ 500
Remittances from Home Office		1,500
Home Office Current		10,000
Sales		16,000
Merchandise from Home Office	10,000	
Purchases	3,000	
Expense	2,000	
	£28,000	£28,000

Inventory—£2,000

The branch then closes its books and prepares statements, as follows.

Profit and Loss	£15,000	
Merchandise from Home Office		£10,000
Purchases		3,000
Expense		2,000

Inventory	2,000	
Sales .	16,000	
Profit and Loss		18,000
Profit and Loss	3,000	
Home Office Current		3,000
Home Office Current	11,000	
Remittances to Home Office		11,000
Remittances from Home Office	1,500	
Home Office Current		1,500

Branch Profit and Loss Statement

For the Year Ended December 31, 193-

Sales		£16,000
Less Cost of Goods Sold		
Merchandise from Home Office	£10,000	
Purchases	3,000	
Total	£13,000	
Less Inventory—December 31	2,000	11,000
Gross Profit on Sales		£ 5,000
Less Expense		2,000
Net Profit		£ 3,000

Statement of Home Office Current Account

(On Branch Books)

Remittances to Home Office	£11,000	Merchandise from Home Office	£10,000
Balance, December 31.	3,500	Remittances from Home Office	1,500
		Net Profit.	3,000
	£14,500		£14,500

Branch Balance Sheet

December 31, 193-

Assets		Liabilities	
Cash	£ 1,000	Accounts Payable	£ 500
Accounts Receivable	1,000	Home Office Current	3,500
Inventory	2,000		
	£ 4,000		£ 4,000

Conversion of branch trial balance.—The branch sends the home office copies of its trial balance, inventory, closing entries, profit and loss statement, statement of the Home Office Current account, and balance sheet. As the trial balance and inventory furnish the basis for all of the other statements, the home office proceeds to convert the trial balance and inventory from pounds to dollars, so that:

(1) The net profit can be taken up on the home office books.

(2) The home office and branch profit and loss statements can be combined.
(3) The home office and branch balance sheets can be combined.

The following rules have come to be accepted as standard practice for making the conversions from foreign to domestic currency:

Current assets (including the final inventory) and current liabilities: at the rate which is current at the end of the period. This rate is used because it furnishes the best evidence of the present value of the assets (which presumably will shortly be converted into cash that may be remitted to the home office) and the present liability on current debts.

Fixed assets: at the rate which was current at the time when the assets were purchased. The reason for using this rate is fully discussed in a later section of this chapter.

Inventory at the beginning of the period: at the rate which was current at that date. This rate is used because, at the beginning of the period, the inventory was a current asset and was converted at the then current rate; as this inventory was the closing inventory in one statement and will be the opening inventory in the next statement, it should appear in the two statements at the same dollar value, and such a value can be obtained only by converting the inventory at the same rate for both statements.

Nominal accounts: at an average rate for the period. This average rate may be determined in several ways: by averaging the daily rates for the year; by averaging twelve monthly rates; by using a weighted average which gives more importance to the rates prevailing during busy seasons than to the rates prevailing during slack seasons; or by dividing the balance of the branch account, Remittances to Home Office (pounds), into the balance of the home office account, Remittances from Branch (dollars), thus determining the average rate at which profits were transferred to the home office in the form of cash.

Accrued expense and income, and deferred charges and expenses. These items have two aspects. On the one hand, they affect the nominal items that appear in the profit and loss statement, and on the other hand, they enter into the balance sheet. As nominal items they should be converted at an average rate, while as assets and liabilities they should be converted at the current rate. But it is impossible to convert them at both rates. As the items are generally so small in amount that they are relatively insignificant, it is usually satisfactory to convert them at the current rate for both purposes. Or an adjusted trial balance in the foreign currency may be prepared, in which the expense and income accounts will have been charged and credited with the adjusting items; the nominal accounts, as adjusted, can then be converted at an average rate; and the accrued and deferred items, which will appear in the balance sheet, can be converted at the current rate.

Reserves The rate at which a reserve should be converted will depend on the nature of the reserve. If it represents a current liability, it should be converted at the current rate. If it is a valuation reserve set up against a current asset, as the Reserve for Bad Debts, it should be converted at the current rate, since the asset is converted at that rate. The Reserves for Depreciation should be converted at the same rates as the fixed asset accounts. But since a fixed asset account may contain charges for purchases made at various dates (so that the balance must be divided into several portions, and each converted at a different rate), it is better to compute the dollar, or converted, reserve on a percentage basis. Thus, if the reserve on the foreign books is 15% of the asset, the reserve may be converted into dollars by multiplying the dollar value of the asset by 15%, instead of using an exchange rate

Reciprocal accounts: at the dollar balances of the accounts on the home office books, without using any rate; thus:

Remittances from Home Office, at the dollar balance of the home office account, Remittance to Branch.

Remittances to Home Office, at the dollar balance of the home office account, Remittances from Branch.

Merchandise from Home Office, at the dollar balance of the home office account, Shipments to Branch.
Home Office Current account, at the dollar balance of the Branch Current account on the home office books.

The branch trial balance, stated in pounds, will balance when sent by the branch to the home office, but it will not balance after the home office has converted the amounts into dollars, because the items will have been converted at different rates. Therefore an adjusting figure must be entered on the smaller side of the branch trial balance after conversion. This adjustment is supposed to measure the profit or the loss due to exchange fluctuations. If the figure must be entered on the debit side of the branch trial balance, it is a loss, if it must be entered on the credit side of the trial balance, it is a gain. The final disposition of this adjustment in the home office closing entries is discussed on page 443.

Branch Trial Balance
December 31, 193-

	Pounds		Rate	Dollars	
Cash	£ 1,000		C	\$ 5,200	
Accounts Receivable	1,000		C	5,200	
Remittances to Home Office	11,000		R	57,190	
Accounts Payable		£ 500	C		\$ 2,600
Remittances from Home Office		1,500	R		7,780
Home Office Current		10,000	R		51,900
Sales		16,000	A		83,040
Merchandise from Home Office	10,000		R	51,900	
Purchases	3,000		A	15,570	
Expense	2,000		A	10,380	
	£28,000	£28,000		\$145,440	\$145,320
Exchange Adjustment					120
				\$145,440	\$145,440
Inventory—December 31	£ 2,000		C	\$ 10,400	

Rate symbols:
C = Current rate: 5.20.
A = Average rate: 5.19.
R = Balance of reciprocal account on home office books. See home office trial balance, page 441.

Branch profit and loss statement.—From the figures in the converted trial balance, the following profit and loss statement may be prepared in dollars:

Branch Profit and Loss Statement

For the Year Ended December 31, 193-

Sales		$83,040 00
Less Cost of Goods Sold.		
Merchandise from Home Office	$51,900 00	
Purchases	15,570 00	
Total	$67,470 00	
Less Inventory, December 31	10,400 00	57,070 00
Gross Profit on Sales.		$25,970 00
Less Expense		10,380 00
Net Profit		$15,590 00

Branch balance sheet.—The converted trial balance and final inventory also furnish the information for the following branch balance sheet·

Branch Balance Sheet

December 31, 193-

Assets		
Cash	$ 5,200 00	
Accounts Receivable	5,200 00	
Merchandise Inventory	10,400 00	$20,800 00
Liabilities		
Accounts Payable		2,600 00
Net Assets		$18,200 00

Home office closing entries.—The home office trial balance at the end of the year is shown below:

Cash	$ 27,410 00	
Accounts Receivable	31,000 00	
Branch Current	51,900 00	
Remittances to Branch	7,780 00	
Accounts Payable		$ 6,000 00
Remittances from Branch		57,190 00
Capital Stock		50,000 00
Sales		150,000 00
Shipments to Branch		51,900 00
Purchases	175,000 00	
Expense	22,000 00	
	$315,090 00	$315,090 00

Inventory, December 31, $10,000 00

The home office closing entries may be divided into three groups

(a) Entries to determine the profit from home office operations.

(b) Entries to take up the branch profit and to close the

temporary accounts with the branch

(c) Entries to adjust the balance of the Branch Current account to bring it into agreement with the net assets at the branch.

These entries are illustrated below.

(*a*) *Entries to determine the profit from home office operations.*

Shipments to Branch	$ 51,900 00	
Purchases		$ 51,900 00
To credit Purchases with the cost of goods sent to branch		
Profit and Loss	145,100 00	
Purchases		123,100 00
Expense		22,000 00
Inventory, December 31	10,000 00	
Sales	150,000 00	
Profit and Loss		160,000 00

The balance of the Profit and Loss account is now $14,900.00, the amount of the home office profit from operations.

(*b*) *Entries to take up the branch profit and to close the temporary accounts with the branch.*

Branch Current	$15,590 00	
Branch Profit and Loss		$15,590 00
To take up the net profit of the branch, as shown by the branch profit and loss statement converted into dollars.		
Branch Current	7,780 00	
Remittances to Branch		7,780 00
To close the temporary remittances account		
Remittances from Branch	57,190 00	
Branch Current		57,190 00
To close		

Finally, the home office will close both the home office profits and the branch profits into surplus by the following entry:

Profit and Loss	$14,900 00	
Branch Profit and Loss	15,590 00	
Surplus		$30,490 00

(c) *Entries to adjust the balance of the Branch Current account to bring it into agreement with the net assets at the branch.*—After the foregoing entries affecting the Branch Current account have been made, this account on the home office books will appear as follows:

Branch Current

Shipments to Branch	$51,900 00	Remittances from Branch	$57,190 00
Branch Profit	15,590 00		
Remittances to Branch	7,780 00		

The balance of this account is now $18,080.00, but the branch balance sheet on page 441 shows that the net assets at the branch are valued at $18,200.00. In other words, the balance of the Branch Current account is $120.00 smaller than the value of the net assets at the branch. When the combined balance sheet of the home office and the branch is prepared, the balance of the Branch Current account on the home office books will be eliminated, and will be replaced by the assets and liabilities of the branch. This cannot be done unless the balance of the Branch Current account on the home office books is exactly equal to the net assets at the branch.

It therefore becomes necessary to debit the Branch Current account, $120.00. It will be noted that this $120.00 is the amount of the adjustment entered in the branch trial balance after conversion (see page 440), and attention has already been called to the fact that this adjustment represents the profit or loss on exchange. The question now arises concerning the proper offsetting entry. Two common methods are in use.

First, the exchange adjustments may be made through Branch Profit and Loss. If the Branch Current account balance must be increased to make it agree with the branch net assets, the offsetting credit may be made to Branch Profit and Loss before the balance of that account is transferred to Surplus. If the current account balance must be decreased, the offsetting debit may be to Branch Profit and Loss. Making the adjustment through Branch Profit and Loss may be justified on the theory that the branch profit as computed (and charged to Branch Current account and credited to Branch Profit and Loss) is an estimate based on the use of

arbitrary rates, hence the exchange adjustment is a correction of this estimate.

Second, the exchange adjustment may be made through a Reserve for Exchange, on the theory that the exchange fluctuation is an unrealized and an uncertain matter, and that any profits which seem to have been made by a favorable fluctuation during one year may be offset by losses from unfavorable fluctuations in a succeeding year. Therefore it is more conservative to credit the exchange adjustment to a reserve, where it will be available to absorb exchange losses in the future. If no reserve exists, an exchange loss should be charged to Profit and Loss, and if the loss exceeds the reserve, the excess should be charged to Profit and Loss.

Adopting the second procedure as the more conservative, the closing of the home office books would be completed by the following entry

Branch Current	$120 00	
Reserve for Exchange		$120 00

Combined statements.—The following exhibits show the working papers from which the combined balance sheet is prepared, and the combined profit and loss statement.

THE *X Y Z* COMPANY
Combined Balance Sheet Working Papers
December 31, 193-

	Home Office	Branch	Elimi-nations	Combined Balance Sheet
Assets				
Cash	$27,410 00	$ 5,200.00		$32,610 00
Accounts Receivable	31,000 00	5,200 00		36,200 00
Inventory	10,000 00	10,400 00		20,400 00
Branch Current	18,200 00		$18,200 00	
	$86,610 00	$20,800 00	$18,200 00	$89,210 00
Liabilities and Net Worth				
Accounts Payable	$ 6,000 00	$ 2,600 00		$ 8,600 00
Reserve for Exchange	120 00			120 00
Capital Stock	50,000 00			50,000 00
Surplus	30,490 00			30,490 00
Home Office Current		18,200 00	$18,200 00	
	$86,610 00	$20,800 00	$18,200 00	$89,210 00

THE *X Y Z* COMPANY
Home Office and Branch Profit and Loss Statement
For the Year Ended December 31, 193-

	Home Office		Branch		Combined	
Sales		$150,000 00		$83,040 00		$233,040 00
Less Cost of Goods Sold:						
Purchases	$175,000 00		$15,570 00		$190,570 00	
Transfers from Home Office to Branch	51,900 00		51,900 00			
Net and Total	$123,100 00		$67,470 00			
Less Inventory, December 31	10,000 00		10,400 00		20,400 00	
Cost of Goods Sold		113,100 00		57,070 00		170,170 00
Gross Profit on Sales		$ 36,900 00		$25,970 00		$ 62,870 00
Less Expense		22,000 00		10,380 00		32,380 00
Net Profit		$ 14,900 00		$15,590 00		$ 30,490 00

Conversion of nominal accounts.—In the preceding illustration, the standard rule of converting nominal account balances at an average rate has been applied. It seems, however, that, in determining what rate to use, consideration should be given to the difference between the branch net assets at the beginning and at the end of the period.

If the branch net assets were approximately the same at the beginning and the end of the period, it is apparent that the profits have been transferred to the home office by remittances. This means that the profits have been converted into cash, and the average rate at which the profits have been transferred in cash to the home office can be determined by dividing the dollar balance of the home office account, Remittances from Branch, by the pound balance of the branch account, Remittances to Home Office. It would seem logical in such cases to use this average rate in converting the nominal account balances.

On the other hand, if the branch net assets have increased during the period by an amount approximately equal to the profits of the period, it is apparent that the profits remain at the branch, probably in increased net current assets. As these current assets are converted at the current rate, it seems logical in such cases to convert the nominal accounts at the current rate. That is, if the current asset accounts, which show how the profits are invested, are converted at the current rate, it is consistent to use the current rate in converting the nominal accounts, which measure the profits.

In the preceding illustration, the branch began the year with no assets; during the year its profits were £3,000; at the end of the period its net current assets were £3,500. The profits therefore remain at the branch. Converting nominal accounts at the 5.20 rate, current at the end of the year, would cause the branch profit and loss statement to appear as follows:

Sales		$83,200 00
Less Cost of Goods Sold		
Purchases	$15,600 00	
Merchandise from Home Office	51,900 00	
Total	$67,500 00	
Less Inventory, December 31	10,400 00	57,100 00
Gross Profit on Sales		$26,100 00
Less Expense		10,400 00
Net Profit		$15,700 00

The profit and loss statement in which nominal account balances were converted at the average rate, showed a net profit of $15,590.00, and an exchange adjustment debiting the Branch Current account $120.00, was necessary. The statement just given shows profits of $15,700.00, or an increase of $110.00. Therefore, a debit exchange adjustment of $10.00, instead of $120.00, should be made in the Branch Current account. It is apparent that this method reduces the amount of the exchange adjustment. But this will be true only when the increase in the branch's net assets during the period results from branch profits and is approximately equal to the profit.

Branch fixed assets.—There is a general accounting principle which requires that profits and surplus shall not be affected by valuing fixed assets at market prices. According to this principle, it is improper to convert branch fixed assets at current exchange rates, if such rates are higher or lower than the rates prevailing at the dates of acquisition of the fixed assets, because the assets would thus be virtually written up or down as the result of a market fluctuation

Since branch fixed assets should always be converted at the rate which prevailed at the date of acquisition, it is necessary to provide some accounting method by which the dollar value of foreign currency expenditures for fixed assets can be easily ascertained. For, if expenditures for branch fixed assets are made frequently, many different rates will exist because of different acquisition dates, and each rate will apply to a portion of the fixed asset account.

If the fixed asset accounts are kept on the branch books, two money columns should appear on each side. Expenditures made by the branch should be charged to the account in pounds, with a memorandum in the inner, or dollar, column, showing the current value of the pounds spent. If fixed assets are purchased by the home office and sent to the branch, the home office should charge the Branch Current account with the dollars spent, and notify the branch of the equivalent pound and dollar values at the date the expenditure was made. The branch will then debit the fixed asset accounts at both the dollar and pound values, and credit the Home Office Current account at the pound value. The fixed asset accounts will

thus show the dollar cost of the fixed assets, as well as the pound cost; and the dollar cost thus shown will be used when the branch trial balance is converted into dollars. The depreciation reserve stated in pounds on the branch books will be converted into dollars on a percentage basis For instance, if the balance in the reserve on the branch books is 25% of the asset account balance, the reserve should be 25% of the asset balance stated in dollars.

The problems of conversion can be simplified by carrying the branch fixed assets in dollars on the home office books. If this practice is followed, any expenditure made by the branch for fixed assets will be charged to the Home Office Current account in pounds. The branch will notify the home office of the expenditure and of the rate prevailing at the date of the expenditure, and the home office will debit branch fixed assets (in properly classified accounts) and credit the Branch Current account at the dollar value obtained by converting at the stated rate. Any expenditures made by the home office will be charged to the branch fixed asset accounts on the home office books

When the fixed assets are carried on the home office books, the depreciation reserves will also be set up on these books, after the home office has taken up the profit reported by the branch, an entry will be made debiting Branch Profit and Loss and crediting the depreciation reserve.

Expenses incurred by the home office for the benefit of the branch may be charged against the Branch Profit and Loss account in a similar manner, or may be charged to the Branch Current account and taken up on the branch books by debits to expense accounts and a credit to the Home Office Current account.

CHAPTER 54

FOREIGN EXCHANGE (Concluded)

Foreign sales agency.—One characteristic difference between an agency and a branch is that the former does not keep its own accounts receivable whereas the latter does. We therefore have the problem of considering the records to be kept by a concern which maintains a foreign agency.

The agency will probably be supplied with a working fund; the first draft sent to the agency will be charged to Foreign Agency Working Fund at the cost of the draft; later replenishing drafts will be charged to Agency Expense. At the end of the period, when the books are closed, the balance of cash at the agency should be converted at the current rate, and any difference between the value thus determined and the balance of the Agency Working Fund account should be taken up as a debit or a credit to Exchange.

If sales are billed in United States currency, no special conversion problems arise. A separate foreign sales book may be kept if desired, and the foreign accounts receivable may be kept in a separate subsidiary ledger. But sales, returns and allowances, and remittances will all be on a dollar basis, and no exchange adjustments will need to be made.

If sales are billed in the foreign currency, the problem is more difficult The simplest way to deal with it is to keep a separate set of books of original entry for foreign business. The sales book will have a Foreign Amount column and a Dollar Amount column. Entries will be made for the foreign billing and for the dollar value thereof at the time of the sale. When postings are made to the subsidiary accounts receivable ledger, the foreign amount will be entered in an inner, or memorandum, column, and the dollar amount in the outer column. A Foreign Accounts Receivable controlling account will be kept in the general ledger, charged in an inner column with the foreign amount of sales, and in an outer column with the dollar amount. This general ledger account will thus

control the subsidiary ledger both in foreign and in dollar amounts. The total of the Dollar column of the sales book will be posted also to the credit of Foreign Agency Sales.

If returns and allowances are sufficiently frequent to warrant it, a foreign returned sales and allowances book may be kept with two money columns; the detail in both currencies will be posted to the credit of the personal accounts in the subsidiary ledger, both column totals will be posted to the Foreign Accounts Receivable controlling account; and the total of the Dollar column will be posted to the Foreign Agency Returned Sales and Allowances account. If returned sales and allowances are rarely made, they can be entered in the foreign journal, which can also be used for notes and other time paper.

The foreign cash receipts book will need columns as follows:

Date	Name	Explanation	Foreign Amount	Dollar Amount	Loss on Exchange	Profit on Exchange	Bank

To illustrate the use of such a cash book, assume that an American exporter sells to an English importer an invoice of £1,000 at a time when the rate is 5.17. The English importer obtains an allowance of £10 at a time when the rate is 5.18. The allowance can be converted at the rate which was current when the sale was made, or at the rate current at the date of the allowance, whichever is more readily ascertainable. The choice of rate will affect merely the final exchange adjustment. Assuming that the allowance is converted at the current rate of 5.18, the debtor's account in the subsidiary ledger will appear as follows:

English Importer

			£	$			£	$
Sale	..	..	1,000	5,170 00	Allowance		10	51 80

The indebtedness is now £990, and is represented by a dollar balance of $5,118.20.

The account is settled by a draft for £990, which is sold by the American at 5.175, or for $5,123.25. An entry will be made in the cash book as follows:

Date	Name	Explanation	Foreign Amount	Dollar Amount	Loss on Exchange	Profit on Exchange	Bank
Dec 14	English Importer		£990	$5,118 20		$5 05	$5,123 25

The entries in the Foreign Amount and Dollar Amount columns will be posted to the subsidiary ledger account, thus balancing it. The totals of these two columns will be posted to the Foreign Accounts Receivable controlling account. The totals of the Exchange columns will be posted to Exchange, and the total of the Bank column will be charged to the Bank account in the general ledger. Ignoring the pound entries, which are for memorandum only, the cash book entry is equivalent to the following journal entry.

Bank (for proceeds of draft)	$5,123 25	
London Importer (to balance account)		$5,118 20
Exchange		5 05

At the close of the accounting period, the pound balance of the Foreign Accounts Receivable controlling account may be converted into dollars at the current rate of exchange, and any profit or loss may be taken up by the method followed by banks in computing profit on foreign exchange dealings. (See page 429.)

Foreign purchasing agency.—The methods just described may be followed by a concern operating an agency abroad for the purpose of making purchases which are billed to and paid by the home office in terms of foreign currency. A foreign purchase book, returned purchases and allowances book, journal, cash disbursements book, Accounts Payable account, and subsidiary accounts payable ledger would be kept. Postings would be made in the manner similar to that described for a sales agency.

Foreign manufacturing plant.—If a foreign factory is established, the accounting problem is one of computing costs rather than of computing profits Instead of forwarding merchandise to the branch and receiving cash in return, the home office sends cash, and perhaps supplies, to the foreign factory and receives finished goods. The problem may also be complicated by the fact that a plant is constructed, in which case it will be necessary to ascertain the dollar cost of the plant as well as the dollar cost of the product.

Exchange rates will affect costs of construction and production by determining the number of units of foreign currency obtained from home office remittances; and con-

struction and production should be charged with the dollar cost of the foreign money used for these purposes. Therefore the foreign factory books should be kept in both currencies.

Drafts received from the home office will be converted into foreign currency at different rates at different dates during the period; the Cash account should show the dollars remitted and the foreign currency obtained When payments are made, the construction and production accounts should be charged with the foreign currency spent, and with the dollar cost thereof This dollar cost may be computed on the first-in first-out theory, or by the use of an average rate. The following illustration shows the principles and general methods applied, using the first-in first-out theory. The illustration is limited to production, the costs of which are charged directly to Finished Goods; it is understood, of course, that in practice detailed manufacturing accounts would be kept.

The home office sends a draft of $52,000.00, which is converted into pounds on January 3, at 5 20

The branch pays £5,000 for raw materials on January 8 (As the only cash on hand cost 5 20, production is charged at that rate)

The branch pays £3,000 for labor on January 9, charging production at the 5 20 rate.

The home office sends a draft for $52,100 00, which is converted into pounds on January 10, at 5.21.

The branch pays £3,000 for manufacturing expenses on January 12, £2,000 of the first remittance was available for this payment, the dollar cost of which, at 5 20, was $10,400 00. The remaining £1,000 is assumed to have been paid from the second remittance, the dollar cost of which, at 5.21, was $5,210 00.

The branch ships half of its manufactured product to the home office on January 13.

The branch accounts are illustrated on the opposite page.

The branch trial balance will appear as follows:

	Dollars		Pounds	
Home Office Current		75,495 00		14,500
Cash	46,890 00		9,000	
Finished Goods.	28,605 00		5,500	
	75,495 00	75,495 00	14,500	14,500

Home Office Current

		$	Rate	£			$	Rate	£
Jan 13	Merchandise	28,605 00	5 2009	5,500	Jan 3	Cash	52,000 00	5 20	10,000
	Balance	75,495 00		14,500	10	Cash	52,100 00	5 21	10,000
		104,100 00		20,000			104,100 00		20,000
						Balance	75,495 00		14,500

Cash

		$	Rate	£			$	Rate	£
Jan 3	Home Office	52,000 00	5 20	10,000	Jan 8	Materials	26,000 00	5 20	5,000
10	Home Office	52,100 00	5 21	10,000	9	Labor	15,600 00	5 20	3,000
					12	Manufacturing Expense	10,400 00	5 20	2,000
					12	Manufacturing Expense	5,210 00	5 21	1,000
						Balance	46,890 00	5 21	9,000
		104,100 00		20,000			104,100 00		20,000
	Balance	46,890 00	5 21	9,000					

Finished Goods*

		$	Rate	£			$	Rate	£
Jan 8	Materials	26,000 00	5 20	5,000	Jan 13	Home Office	28,605 00	5 2009	5,500
9	Labor	15,600 00	5 20	3,000		Inventory	28,605 00	5 2009	5,500
12	Manufacturing Expense	10,400 00	5 20	2,000					
12	Manufacturing Expense	5,210 00	5 21	1,000					
		57,210 00		11,000			57,210 00		11,000
	Inventory	28,605 00	5 2009	5,500					

* To simplify the illustration, all manufacturing costs are charged to this account In practice, detailed cost accounts should be kept, the method of determining the dollar charges to these accounts would be the same as illustrated

The home office account with the branch will appear as follows:

Branch Current

Cash	$ 52,000 00	Merchandise	$ 28,605 00
Cash	52,100 00	Balance	75,495 00
	$104,100 00		$104,100 00

The balance of the account agrees with the net assets at the foreign plant, as stated in the Dollar columns of the branch trial balance.

If construction and production are carried on simultaneously, the fixed asset accounts should be charged with the dollar value of the pounds expended, this dollar value should be computed in the same way as the dollar value of the pounds spent for production.

If materials and supplies are sent from the home office to the branch, they should be converted from dollars to pounds at the date of arrival, and charged to the Materials and Supplies account in both currencies, as is done with cash. Materials and supplies requisitioned out of stores should be credited to the account at two values; if several shipments have been received, the dollar value should be ascertained at an average rate or by the first-in first-out method.

If there are any current liabilities in the foreign country for operating or construction costs, it would seem proper to convert these liabilities (for the purpose of combining the branch and home office statements) at the rate at which the cash on hand was converted, provided there is sufficient cash on hand to pay these debts. If there is not sufficient cash on hand to pay the debts, the excess should be converted at the current rate, because, presumably, the debts will be paid partly with cash on hand which was obtained at a past rate, and partly with cash to be received in the future. The present current rate is the best evidence of what this future cash will cost in dollars.

The foreign subsidiary.—Foreign branches may be, and frequently are, organized as separate companies, incorporated under the laws of a foreign country. In such cases the parent company should charge the Investment in Foreign Subsidiary account with the dollar cost of the stock, and with its share of the subsidiary profits; and should credit the Investment

account with the dollar proceeds of drafts received as dividends. When the balance sheets are consolidated, the subsidiary Capital Stock account should be converted at the dollar price paid by the parent company, and the subsidiary Surplus account should be arbitrarily stated at an amount which will bring the subsidiary balance sheet into balance after conversion into dollars. If the parent company's Investment account does not agree with the subsidiary's capital stock plus surplus as thus converted (assuming 100% ownership), an adjusting journal entry should be made debiting or crediting the Investment Account, with an offsetting debit or credit to Profit and Loss or to a Reserve for Exchange.

The parent company will bill goods to the subsidiary and will keep a current account to record such charges, crediting the current account with payments made against invoices. The parent company may bill in dollars or in the foreign currency. If the parent company bills in dollars, the foreign subsidiary will convert the invoice to foreign currency at the rate prevailing at the date the goods are received, recording the dollar liability in an inner column of the Parent Company Current account If invoices are paid by dollar drafts, and if there has been a change in rate between the date of receipt of the goods and the date of payment, the cost of the draft in foreign currency will be more or less than the foreign currency credit to the parent company made by the subsidiary at the time of receiving the goods. This difference will be a debit or a credit to Exchange on the foreign subsidiary's books. Columns may be provided in the cash book for this loss or gain, as described in the section on "Foreign sales agency," on page 449; or the loss or gain may be taken up by a journal entry.

If the parent company bills in the foreign currency, it will be necessary to keep the Foreign Subsidiary Current account on the home office books in both currencies, any loss or gain due to fluctuations in exchange between the date of shipment and the date of collection will be taken up on the parent company's books.

The fixed asset accounts of the foreign subsidiary should be kept in both currencies, and the dollar value of expenditures entered in an inner memorandum column at the rate

prevailing at the date of the expenditure This inner column will furnish the information required to convert the fixed assets from foreign to domestic currency, without introducing an element of variation due to exchange fluctuations.

The consolidation of the statements will be made in much the same manner as is followed in the consolidation of the statements of a parent and subsidiary both of which are incorporated in the same country. If there is a minority interest, it will have to be shown; if goods are billed to the subsidiary at a profit, a reserve for the unrealized profit in the inventory will have to be provided; and all of the other complications discussed in the chapters on consolidated statements may have to be faced. For our present purposes, however, the chief question of interest is the one of conversion, therefore all possible complications will be avoided in the illustration which follows, it should be understood that problems peculiar to consolidated statements (whether the subsidiary is a domestic or a foreign corporation) would be dealt with in the manner described in the chapters on consolidated statements.

Illustration.—Following are a number of typical transactions, with journal entries, indicating how the transactions would be recorded on the books of the domestic parent company and the foreign subsidiary. The parent company's entries are at the left, and the subsidiary's entries at the right.

(1) The United States Company organized a foreign subsidiary called the London Company, with a capital stock of £10,000. The United States Company paid for this stock with a £10,000 draft purchased at 5 20.

(Note.—It is desirable to make a memorandum in the foreign Capital Stock account showing the cost of this stock to the parent company in dollars, because the parent company's Investment account will receive other entries for earnings, dividends, and exchange adjustments, so that the balance will not be the dollar cost of the stock. This dollar memorandum, to be made on the subsidiary's books, is indicated in the following entry)

Investment in London Co	$52,000		Cash	£10,000	
Cash		$52,000	Capital Stock ($52,000)		£10,000

(2) The London Company purchased a complete plant for £7,000, the current exchange rate at the date of purchase was 5 19

(Note —The London Company should show, parenthetically in the fixed asset accounts, the dollar cost of the plant, converted at the rate current at the date of making the expenditure.)

Plant ($36,330 00)	£ 7,000	
Cash . .		£ 7,000

(3) The United States Company shipped goods to the subsidiary, billing the subsidiary at the cost of the goods, $134,680 00.

(Note.—The invoices were made out in dollars and are payable in dollars The rate at the date of arrival was 5 20. Hence the London Company took up the goods at £25,900, showing the dollar liability short in the United States Company Current account.)

London Co Current	$134,680		Purchases	£25,900	
Sales to London Co		$134,680	U.S Co Current ($134,680 00)		£25,900

(4) Sales on account by London Company, £21,000

Accounts Receivable	£21,000	
Sales		£21,000

(5) Collections on account by London Company, £19,000

Cash	£19,000	
Accounts Receivable		£19,000

(6) The London Company paid half of its indebtedness to the United States Company (on current account for purchases) by sending a draft for $67,340 00 ($134,680 00 ÷ 2). The cost of this draft at 5.18 was £13,000 ($67,340 00 ÷ 5.18).

(Note.—The total liability of the London Company for purchases, stated in pounds, was £25,900 Half of this amount is £12,950. Since the draft cost £13,000, the foreign subsidiary incurred an exchange loss of £50. The foreign company might have a cash book column for such exchange losses and gains, but entries in a cash book with such a column would be equivalent to the journal entry shown on the following page)

Cash	$67,340		U S Co Current ($67,340 00)	£12,950	
London Co Current		$67,340	Exchange	50	
			Cash		£13,000

(7) The London Company paid expenses of £2,000

Expense	£ 2,000	
Cash		£ 2,000

(8) The London Company provided depreciation at 4% on its plant.

Depreciation	£ 280	
Res for Dep'n.		£ 280

(9) The London Company paid a dividend of £2,000 to the United States Company The United States Company sold the draft at 5 19, receiving $10,380 00

Cash	$10,380		Dividend	£ 2,000	
Investment in London Co		$10,380	Cash		£ 2,000

Subsidiary's trial balance and closing.—Following are the trial balance and the closing entries of the London Company at the end of the year. The dollar balances of accounts kept in both currencies are shown in parentheses.

Cash	£ 5,000	
Accounts Receivable	2,000	
U S Co Current ($67,340 00)		£ 12,950
Plant ($36,330 00)	7,000	
Reserve for Depreciation		280
Capital Stock ($52,000 00)		10,000
Sales		21,000
Purchases	25,900	
Expense	2,000	
Depreciation	280	
Exchange	50	
Dividend	2,000	
	£ 44,230	£ 44,230

Inventory, December 31 £ 10,000.

Closing Entries

Profit and Loss	£ 28,230	
Purchases		£ 25,900
Expense		2,000
Depreciation		280
Exchange		50
Inventory	10,000	
Sales	21,000	
Profit and Loss		31,000

Profit and Loss	£2,770	
Surplus		£2,770
Surplus	2,000	
Dividend		2,000

Parent company's conversion.—Following are the trial balance, profit and loss statement, and surplus statement both in pounds and in dollars as converted by the parent company.

Trial Balance

	Pounds		Rate	Dollars	
Cash	5,000		B	25,925 00	
Accounts Receivable	2,000		B	10,370 00	
U S Co Current		12,950	A		67,340 00
Plant	7,000		A	36,330 00	
Reserve for Depreciation (4%)		280	F		1,453 20
Capital Stock		10,000	A		52,000 00
Sales		21,000	C		108,990 00
Purchases	25,900		D	134,680 00	
Expense	2,000		C	10,380 00	
Depreciation	280		F	1,453 20	
Exchange	50		C	259 50	
Dividend	2,000		E	10,380 00	
	44,230	44,230		229,777 70	229,783 20
Exchange Adjustment				5 50	
				229,783 20	229,783 20

Inventory £10,000 @ 5 185, $51,850 00

Explanation of conversions:

A = Dollar balance shown in dollar memorandum column on London Company books.
B = Current rate on December 31. 5.185.
C = Average rate for year. 5.19.
D = Balance of reciprocal account (Sales to London Company) on United States Company books.
E = Amount credited to Investment account on United States Company books.
F = At 4% of gross dollar value of plant.

LONDON COMPANY

Balance Sheet, December 31, 193-

Assets			Liabilities and Net Worth		
Cash	£ 5,000	$ 25,925 00	U S Co Current	£12,950	$ 67,340 00
Accts Rec	2,000	10,370 00	Capital Stock.	10,000	52,000 00
Inventory	10,000	51,850 00	Surplus	770	3,681 80
Plant Less Depreciation.	6,720	34,876 80			
	£23,720	$123,021 80		£23,720	$123,021 80

LONDON COMPANY
Profit and Loss Statement
Year Ended December 31, 193-

	Pounds		Dollars	
Sales		21,000		108,990 00
Less Cost of Goods Sold				
Purchases	25,900		134,680 00	
Less Inventory, December 31	10,000	15,900	51,850 00	82,830 00
Gross Profit on Sales		5,100		26,160 00
Deduct:				
Expenses	2,000		10,380 00	
Depreciation	280	2,280	1,453 20	11,833 20
Net Profit on Operations		2,820		14,326 80
Exchange Loss		50		259 50
Net Profit		2,770		14,067 30

LONDON COMPANY
Surplus Statement
Year Ended December 31, 193-

Profits for the Year	£ 2,770	$14,067 30
Less Dividends	2,000	10,380 00
Balance, December 31	£ 770	$ 3,687 30
Less Exchange Adjustment—required to make the Capital Stock and Surplus in dollars equal to the converted value of the London subsidiary's net assets		5 50
Adjusted Balance of Surplus		$ 3,681 80

Parent company's closing.—Following are the trial balance and closing entries of the parent company:

UNITED STATES COMPANY
Trial Balance
December 31, 193-

Cash	$ 17,720 00	
Accounts Receivable	10,000 00	
London Company Current	67,340 00	
Investment in London Company	41,620 00	
Plant	60,000 00	
Reserve for Depreciation		$ 3,000 00
Accounts Payable		9,000 00
Capital Stock		150,000 00
Sales		200,000 00
Sales to London Company		134,680 00
Material Purchases	100,000 00	
Direct Labor	90,000 00	
Manufacturing Expense	85,000 00	
Depreciation	3,000 00	
Expense	22,000 00	
	$496,680 00	$496,680 00

Inventories, December 31	
Raw Materials	$6,000 00
Goods in Process	3,000 00
Finished Goods	5,000 00

Closing Entries

			Debit	Credit
Raw Materials Inventory			$ 6,000 00	
Material Purchases				$ 6,000 00
Manufacturing Account			272,000 00	
Material Purchases				94,000 00
Direct Labor				90,000 00
Manufacturing Expense				85,000 00
Depreciation				3,000 00
Goods in Process Inventory			3,000 00	
Manufacturing Account				3,000 00
Finished Goods			269,000 00	
Manufacturing Account				269,000 00
Sales to London Company			134,680 00	
Finished Goods				134,680 00
Profit and Loss			129,320 00	
Finished Goods				129,320 00
Cost of goods sold				
Cost of goods manufactured		$269,000 00		
Less Shipments to				
London	$134,680 00			
Inventory	5,000 00	139,680 00		
		$129,320 00		
Sales			200,000 00	
Profit and Loss				200,000 00
Profit and Loss			22,000 00	
Expense				22,000 00
Investment in London Company			14,067 30	
Profit and Loss				14,067 30
To take up subsidiary net profit per profit and loss statement as converted				
Profit and Loss			5 50	
Investment in London Company				5 50
To record exchange adjustment and to bring the Investment account into agreement with the London net assets				
Profit and Loss			62,741 80	
Surplus				62,741 80
U S profit		$ 48,680 00		
London profit		14,067 30		
Total		$ 62,747 30		
Less exchange		5 50		
Net profit		$ 62,741 80		

Parent company's investment account.—Following is a statement of the parent company's account with its investment in the London subsidiary after the foregoing entries have been posted

Statement of Account
Investment in London Company
Year Ended December 31, 193-

Cost		$52,000 00
Add Profit		14,067 30
Total		$66,067 30
Deduct		
Dividend	$10,380 00	
Exchange Adjustment	5 50	10,385 50
Balance, December 31, 193-		$55,681 80

Consolidated statements.—The consolidated profit and loss statement of the parent company and its foreign subsidiary, and the consolidated balance sheet working papers, appear on pages 463 and 464.

UNITED STATES COMPANY AND LONDON SUBSIDIARY

Consolidated Statement of Profit and Loss

For the Year Ended December 31, 193-

	U S Company		London Company		Consolidated	
Sales		$200,000 00		$108,990 00		$308,990 00
Cost of Sales.						
Materials.						
Purchases	$100,000 00				$100,000 00	
Less Inventory, December 31	6,000 00				6,000 00	
Materials Used	$ 94,000 00				$ 94,000 00	
Direct Labor	90,000 00				90,000 00	
Manufacturing Expense, Including Depreciation	88,000 00				88,000 00	
Total Manufacturing Cost	$272,000 00				$272,000 00	
Less Goods in Process, December 31	3,000 00				3,000 00	
Cost of Goods Manufactured	$269,000 00				$269,000 00	
Goods Shipped to London	134,680 00		$134,680 00			
Remainder	$134,320 00					
Less Inventory, December 31	5,000 00		51,850 00		56,850 00	
Cost of Sales		129,320 00		82,830 00		212,150 00
Gross Profit on Sales		$ 70,680 00		$ 26,160 00		$ 96,840 00
Expenses, Including Depreciation		22,000 00		11,833 20		33,833 20
Net Profit on Operations		$ 48,680 00		$ 14,326 80		$ 63,006 80
Exchange Loss ($259 50 + $5 50)				265 00		265 00
Net Profit for the Year		$ 48,680 00		$ 14,061 80		$ 62,741 80

UNITED STATES COMPANY AND LONDON SUBSIDIARY

Consolidated Balance Sheet Working Papers

December 31, 193-

	U S Company	London Company	Eliminations	Consolidated Balance Sheet
Assets				
Cash	$ 17,720 00	$ 25,925 00		$ 43,645 00
Accounts Receivable	10,000 00	10,370 00		20,370 00
London Company Current	67,340 00		$ 67,340 00(A)	
Raw Materials	6,000 00			6,000 00
Goods in Process	3,000 00			3,000 00
Finished Goods	5,000 00	51,850 00		56,850 00
Investment in London Company	55,681 80		55,681 80(B)	
Plant Less Depreciation	57,000 00	34,876 80		91,876 80
	$221,741 80	$123,021 80	$123,021 80	$221,741 80
Liabilities and Net Worth				
Accounts Payable	$ 9,000 00			$ 9,000 00
United States Company Current		$ 67,340 00	$ 67,340 00(A)	
Capital Stock	150,000 00	52,000 00	52,000 00(B)	150,000 00
Surplus				
United States Company	62,741 80			62,741 80
London Company		3,681 80	3,681 80(B)	
	$221,741 80	$123,021 80	$123,021 80	$221,741 80

CHAPTER 55

ESTATES AND TRUSTS

Distribution of an estate.—If a person dies intestate—that is to say, without leaving a will—his estate will be distributed among his heirs in accordance with the laws of descent and distribution, the laws of descent determining the disposition of the real estate, and the laws of distribution determining the disposition of the personal property. The disposition of the property is controlled by the probate, or surrogate, court, and the work of collecting the assets, paying the liabilities, and distributing the surplus is placed by the court in the hands of an administrator who is appointed by the court and to whom the court issues letters of administration, evidencing his authority.

If the decedent leaves a valid will, the laws of descent and distribution will not be operative, and the estate will be disposed of in accordance with the wishes of the testator or testatrix as expressed in the will * But before the will can become operative, it must be admitted to probate. A petition is presented to the court, asking that the will be admitted to probate; a date is set for the hearing, and all interested parties are notified. At the hearing, the witnesses to the will testify as to the authenticity of the signatures, if the witnesses are dead or cannot appear, persons familiar with the signatures of the testator and the witnesses may testify as to the authenticity of the signatures; and if the court is satisfied that the will is valid, it is admitted to probate.

If an executor is named in the will, and if he is competent and willing to serve, he will be granted letters testamentary by the court. If no executor is named in the will, or if one is named but is unwilling or incompetent to serve, the court will appoint an administrator.

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* This statement is subject to such exceptions as the widow's option to renounce her rights under the will and claim her distributive share under the law

Duties of the executor or the administrator.—The executor or the administrator is expected to seek out and take possession of the personal property of the decedent, conserve the estate in a prudent manner, pay the liabilities, the Federal estate and income taxes, and the state inheritance and personal property taxes, and distribute the residue of the estate to the heirs or beneficiaries named in the will. If there is no will, the administrator disposes of the property to those who are heirs in accordance with the law. If there is a will, the real estate goes to the devisees, and the personal property to the legatees.

The title to all personal property vests in the executor or the administrator, and passes through him to the heirs or the legatees. It is only rarely that the executor or the administrator exercises any control over the real estate, since, by the laws of most states, title vests in the heirs or the devisees immediately upon the death of the decedent. If, however, the personal property is not sufficient to pay the debts of the estate, the executor may apply to the court for authority to sell parcels of real estate. Or the will may direct the executor to sell real estate to pay debts or to obtain money with which to create a trust. Or the testator may have made a contract to sell real estate; in such cases the title to the real estate passes to the heir, but subject to the obligation of the heir to convey title to the vendee; and since the claim against the vendee is personal property, this property passes into the executor's control.

The proceeds of life insurance policies payable to the estate pass through the hands of the executor and must be accounted for by him, the proceeds of policies payable to specific beneficiaries are payable directly to them and do not go to the executor.

Accounting for assets.—As soon as the executor or the administrator* is appointed, he should take possession of the personal property While the law differs in the various states, it is desirable, and in some states obligatory, to file an inventory of the assets with the court. This inventory should show

* Since the duties of an executor and an administrator are similar, we may hereafter refer to either as inclusive of both

items and values; the values may be estimated by the executor unless the law requires that the valuations be made by independent appraisers.

The inventory should include all personal property of the estate, including advances to heirs or legatees made by the decedent during his life with the understanding that these advances shall be considered a part of his estate. If the will relieves the recipients of such advances from the obligation of repaying them, they need not be included in the inventory. Income accrued up to and including the date of death is a part of the principal of the estate and should be included in the inventory. If any assets are thought to be valueless, they should, nevertheless, be included in the inventory with a statement that they have no value.

Although real estate titles pass directly to heirs without passing through the administrator, or directly to devisees without passing through the executor, it is nevertheless advisable that real estate be inventoried, in order to fulfill the requirements of state inheritance tax laws and the Federal estate tax law. Moreover, in some states the real estate must be included in the inventory, because the inventory, filed with the county recorder, serves as evidence of the passing of title.

When the inventory is completed, it should be made the basis of the opening entry on the executor's books. Enough asset accounts should be opened to classify the property in the records, and these accounts should be debited with the inventory values, the offsetting credit should be made to an account called Estate Corpus or Estate Principal.

Any assets discovered after the inventory is completed should be reported in a supplemental inventory and put on the books by entries debiting asset accounts and crediting an account called Assets Not Inventoried. This account is really a part of the Estate Corpus account, but it is desirable to set up the separate account because the executor, in making his report to the court, should show under separate headings the assets originally inventoried and those subsequently discovered The Assets Not Inventoried account will eventually be closed to the Estate Corpus account.

When an asset is sold, the asset account should be credited with the inventory value, regardless of the price realized.

Gains should be credited to a Gain on Realization account, and losses should be charged to a Loss on Realization account These accounts will eventually be closed to the Estate Corpus account; they are set up temporarily to furnish the information about gains and losses which will be required in making the report to the court. Such losses and gains may be recorded through the journal, or special columns may be provided on the receipts side of the cash book.

Accounting for liabilities.—In some states it is obligatory, and in all states it is advisable, for the executor to give published notice to creditors to present their claims within the legal time limit. Claims will be presented to the executor or to the court, depending on the law of the state; presentation is usually made to the executor The executor should present a statement to the court showing the claims filed. Any claims which the executor considers invalid he may reject. In some states creditors whose claims have been rejected may appeal to the probate court; in other states they must bring suit in the ordinary manner.

The debts must be paid in full before legacies can be paid. If the personal property is not sufficient to pay the debts and the legacies, the legacies will be abated—that is, scaled down. Such provisions for the payment of debts will be made in the following order:

(1) Residuary legacies (including any real estate forming part of the residuary estate) will be abated. Thereafter,
(2) General legacies, payable in cash, will be scaled down proportionately. If these are exhausted,
(3) Any personal property or real estate specifically willed to a legatee or a devisee will be sold.

Liabilities should not be recorded until paid, at which time an entry should be made debiting Debts of Decedent and crediting Cash. One account for debts is sufficient, but the payee should be named in the Explanation column of the account.

Expenses and debts incurred subsequent to the death of the decedent should be divided into two classes: those that are chargeable to the principal, which may be debited to an

account called Funeral and Administration Expense; and those that are chargeable to income, which should be debited to an account called Expense—Income. The rules for distinguishing between these two classes of expenses are discussed later in this chapter. If the estate is a large one, both the Funeral and Administration Expense account and the Expense—Income account may be subdivided.

Accounting for legacies.—A legacy is a gift of personal property made by a will; the recipient of a legacy is called a legatee. A devise is a gift of real property made by a will; the recipient of the gift is called a devisee.

A general legacy is one payable out of the estate in general; the legatee may, with the sanction of the executor, take personal property of the estate to the value of the legacy, or he may be paid in cash.

A specific legacy is a gift of some particular property, as a watch, a library, or named bonds.

A demonstrative legacy is a legacy of cash payable out of a specified fund.

A residuary legacy includes all personal property remaining after the payment of debts and all other legacies. The residuary legatee receives "all the rest, residue, and remainder" of the estate.

Legacies may be paid at any time after the executor takes charge; but unless the estate is clearly sufficient to pay the legacies, taxes, and debts, the executor should defer the payment of legacies until the period for filing claims has expired; otherwise he may incur a personal liability to creditors. The law usually allows the executor the right to defer the payment of legacies for a year, in order to determine the amount of the liabilities. Any income earned on specific legacies during that time belongs to the legatee. Interest on all unpaid legacies begins to accrue at the end of one year from the date of death.

A single account may be opened with Legacies Paid, or a separate account may be opened with each legacy. Separate accounts are desirable if (1) inheritance taxes are to be charged against the legacies, (2) legacies are to be abated in order to pay debts, or (3) income is earned on specific legacies before they are paid. Entries in these accounts are made as follows:

Legacy—John Doe
Cash
Payment of inheritance tax.

Cash
Legacy—John Doe
Income collected on bonds willed to Doe.

Cash
John Doe—Legacy
Refund from Doe for inheritance tax paid, less income collected

John Doe—Legacy
Bonds of *X Q* Company
Payment of legacy to Doe

The will may stipulate that the total inheritance tax shall be paid by the estate, thus reducing only the residuary legacy.

The legacy accounts will remain open until after the final statement has been made up for presentation to the court; they will then be closed into the Estate Corpus account.

Trusts.—The testator may provide in his will that all, or some portion, of the principal of the estate shall be placed in the hands of a trustee, who shall keep the fund invested, distribute the income to certain beneficiaries during a stated period of time, and eventually turn over the principal of the trust to some beneficiary indicated by the will. For instance, he may direct that the income shall be paid to his widow during her life, and that, at her death, the principal shall be paid to his children or to some institution. Or he may direct that the income shall be distributed in equal parts to his children until the youngest one reaches the age of twenty-five, and that the principal shall then be divided equally among them.

A trust created by a will is called a testamentary trust. If the trustee is named in the will, he is called a testamentary trustee. The person who is entitled to receive the income during a stated period, and the person who is entitled eventually to receive the principal, or corpus, are beneficiaries of the trust. The income beneficiary is called the *cestui que trust*. The *cestui que trust* is called a life tenant if he is entitled to the income during the entire period of his life, if he is entitled to the income for a shorter period, he may be referred to merely as the income beneficiary; if the income beneficiary changes from time to time, each beneficiary

may be referred to successively as the present beneficiary. The person who is entitled eventually to receive the principal of the trust is called the remainderman. The *cestui que trust* and the remainderman may be the same person; for instance, a child may be entitled to the income of the trust until he attains his majority, and to the corpus of the trust at that date.

The executor should turn over the trust property to the trustee and record the transfer in the same way that legacies are recorded. The same person may act as executor or administrator and also as trustee, but in such instances his executorship records should be kept entirely distinct from his trusteeship records. The executorship records should show that the executor, as such, has turned certain property over to himself as trustee; and the trusteeship records should show that the trustee, as such, has received the property from himself as executor.

The trustee does not take over the duties of the trusteeship until the trust property is turned over to him. He takes title to real estate at the date of the testator's death, but personal property may not be turned over to him by the executor until some subsequent date However, the trust takes effect as of the date of death, therefore the life tenant is entitled to the income from the trust assets from the date of death.

The trustee's investments must conform to the state laws which prescribe what classes of securities may be purchased by trustees, but the testator may, in the will, allow the trustee to go beyond the narrow limits allowed by law The trustee must exercise diligence and prudence in managing the trust and must keep the funds invested. He is allowed a reasonable time in which to invest cash, after which time he may be charged with interest on uninvested funds.

The trustee's accounts are less involved than those of an executor, because a trustee does not have assets to realize, liabilities to pay, and legacies to distribute. Accounts should be kept with all assets of the trust, which should be offset by a Trust Principal account. Accounts should also be kept with the various kinds of income and expenses The net income thus determined should be transferred to an account with the life tenant, by charging the income accounts, credit-

ing the expense accounts, and crediting the life tenant's account. Payments to the life tenant should be charged to his account.

Accounting for income and expense.—All of the income of a small estate or trust may be credited to a single account called Income, but in a large estate it is preferable to open separate accounts with the various classes of income, such as Interest Income, Dividend Income, and Rent Income.

All expenses deductible from the income may be charged to one account called Expense—Income, or separate accounts may be kept with the various kinds of expense.

If cash collected as income is paid to beneficiaries, the charges should be made to an account called Distributions of Income Cash

Principal and income.—If a trust is created by the will, the executor and the trustee should keep their records in such a way as to distinguish clearly between the principal and the income. The life tenant is entitled to the income, and the remainderman is entitled to the principal. Therefore, if cash is received, the executor or trustee must know, and must indicate in his records, whether the cash belongs in the principal fund or in the income fund. Similarly, a careful distinction must be made between disbursements which are payable out of principal and those which are payable out of income.

A strict distinction between principal and income *must* be maintained in trust accounting, and is customarily maintained in all estate accounting regardless of whether or not a trust is involved.

If the will makes any statements which can be interpreted as indicating the desire of the testator regarding the distinctions to be made between principal and income, these statements will govern. In the absence of any such expressions of intention, the law will govern. In questionable cases the trustee should apply to the court for a ruling.

The questions involving a distinction between principal and income may be classified as follows:

(1) Questions of accrual or apportionment on a time basis; that is, in what cases should cash received go

partly into principal cash and partly into income cash; and in what cases should cash payments be made partly out of principal cash and partly out of income cash?

(2) Questions of classification; that is, what receipts should go wholly into principal cash or wholly into income cash; and what payments should be made wholly out of principal cash or wholly out of income cash?

(3) Questions of impairment, that is, in what cases should a portion of the cash received go into the principal cash to prevent an impairment of the principal?

Questions of accrual.—The distinction between a cash basis and an accrual basis of accounting is well understood as applied to ordinary commercial accounts. The law of trust estates provides that certain items of income and expense "accrue" and shall be accounted for on an accrual basis, and that others shall be accounted for on a cash basis. If an item of income or expense accrues, a proper computation of the interests of the life tenant and the remainderman requires a recognition of the accrual at two dates.

First, there is the date of the death of the testator. Any income which has accrued prior to that date belongs to the corpus of the estate, even though it may not be collected until a subsequent date, income subsequently accruing belongs to the life tenant. Similarly, expenses accrued prior to this date must be paid out of principal cash, whereas expenses accruing subsequently must be paid out of income cash.

Second, there is the date when the tenancy terminates and the remainderman receives the corpus. Income accrued prior to that date belongs to the life tenant or to his estate; income accrued subsequently belongs to the remainderman. A similar distinction must be made in regard to expenses.

The question then is: What earnings and expenses accrue and have to be apportioned between principal and income?

(1) Interest, in general, accrues from day to day, the interest accrued on receivables and investments up to and including the date of death of the testator being principal, and interest accruing thereafter being income. Interest paid as an expense is

similarly accrued. But interest on savings bank deposits usually is not considered to accrue, because of the requirement that the deposit shall remain a stipulated time. Such interest is income of the period when it is credited to the account.

(2) Ordinary cash dividends do not accrue, but are generally considered income of the period when declared. Thus, a dividend declared prior to the testator's death is corpus, even though not collected until after his death; and a dividend declared after his death is income, although paid from profits earned prior to his death. In some states the governing date is that on which the corporation's stock records are closed to determine the "stockholders of record" to whom the dividends are payable. The rule is not so simple in the case of extraordinary cash dividends and stock dividends, the laws differing in the various states.

(3) Rents, whether income or expense, accrue in most states, although not in all. In the states in which they do accrue, rents earned prior to the death of the decedent are corpus, and the portion accruing after his death is income. A similar rule applies to rents paid.

(4) Property taxes do not accrue. Taxes which became a lien on the property before the date of the decedent's death are payable out of principal cash; taxes which became a lien on the property after his death are a charge against income.

(5) Partnership profits do not accrue. The death of the testator dissolves the partnership of which he was a member, and if the books are closed as of the date of his death, the question of accrual will not arise, for all of the profits earned up to the date of death are clearly principal. But the partnership articles sometimes provide that the books shall not be closed until some date subsequent to death; in such cases the profit up to the date of closing the books is considered to be principal even though some of the profit may have been earned after the decedent's death. There is one exception to this rule: If

interest is allowed on a partner's capital, it accrues in accordance with the general interest rule.

(6) Contract profits do not accrue. The executor must complete the contract, but the profits belong to the principal.

(7) Live stock born after the date of the testator's death is income.

(8) Growing crops are income if the land is part of a trust estate, and no attempt need be made to apportion the value of the first crop between principal and income. If the land is given as a devise, the crops go with the land.

Questions of classification.—There are many items of receipts and disbursements which do not involve the question of accrual and apportionment on a time basis, but which involve the equally important question of determining whether the whole amount should be classified as principal or income. These items may be classified as:

(1) Receipts and disbursements applicable to principal.
(2) Receipts and disbursements applicable to income.
(3) Receipts and disbursements of doubtful classification.

Items applicable to principal.—The following expenditures should be charged to principal and paid out of principal cash:

(1) Debts of the decedent, expenses of last illness, and funeral expenses.
(2) Legal fees and court costs in probating the will, in defending it against a contest, and in interpreting it.
(3) Costs of defending the estate against claims rejected by the executor.
(4) Legal fees incurred in effecting a change in executors or trustees.
(5) Federal estate tax and state inheritance tax.
(6) Brokerage fees on changes in investments.
(7) Legal fees and other costs of preserving the principal of the estate.

The following receipts should be credited to principal:

(1) Proceeds of fire insurance policies. The premiums are

payable out of income, but in case of loss the proceeds of the policy are considered to be a replacement of the principal.

(2) The proceeds of the sale of subscription rights The right to subscribe for stock is inherent in the stock, which is corpus; hence all receipts from the sale of subscription rights are principal.

Items applicable to income.—All ordinary operating expenses of the estate or the trust are payable out of income. These include such items as:

(1) Commissions paid for collection of income.
(2) Legal fees paid in matters pertaining to income as distinguished from matters pertaining to the preservation of the estate.
(3) Wages of clerks, bookkeepers, and workmen employed to care for the property.
(4) Costs of caring for and harvesting crops.
(5) Trustee's commissions for collection and disbursement of income.
(6) Ordinary repairs to trust property.
(7) Interest accrued during the life tenancy on mortgages and other liabilities.
(8) Insurance premiums.

Doubtful items.—The rule as to ordinary cash dividends has already been stated: Dividends declared prior to the decedent's death are principal, and those declared after his death are income. The rule as to stock dividends and extraordinary cash dividends is not so clear. In some states both have been held to be principal; in other states both have been held to be income; and in still other states an attempt has been made to allocate the dividends, the portion paid from surplus existing at the testator's death being considered principal, and the portion paid from earnings since his death being considered income.

Repairs and betterments are classified in accordance with the usual accounting rule: Ordinary repairs are chargeable to income; extraordinary repairs to principal, replacements and betterments may be apportioned, the portion making good wear and tear during the period of the trust being charged to

income, and the balance to principal. While the rule is not difficult to state, it is often very difficult to apply.

Special assessments for local benefits may be paid out of principal, if the benefits are expected to add permanent value; otherwise, they should be paid out of income. In some cases a portion may be paid from principal, and the remainder from income.

Unless the will creating the trust gives specific instructions applicable to doubtful cases, the trustee should apply to the court for instructions.

Questions of impairment.—There is a general rule that payments of income must not impair the principal of a trust. Thus, if the trust property consists of mines, oil wells, timber, or other wasting assets, the trustee must provide for depletion when computing income, and must retain such a portion of the receipts from operations as will provide a fund for the replacement of the trust property.

Similarly, if the trust investments consist of stocks in a company operating a wasting asset, dividends will usually include both profits and a return of capital. The trustee must attempt to separate these two elements, paying the life tenant only such a portion of the dividend as represents earnings, and holding for the remainderman such a portion of the dividend as represents a return of capital.

The rule for depreciation is different. Ordinary repairs on fixed assets must be made out of income, but depreciation may be ignored in computing income, and it is not necessary to retain cash out of income to create a depreciation or a replacement fund.

Any losses or gains on the realization of assets are generally considered to be applicable to principal, for the loss or gain is merely the difference between the estimated or inventory value and the actual realized value. The principal of the estate is composed of the assets left by the decedent, or whatever these assets realize.

In accordance with this general theory, if bonds left by the decedent are inventoried at a premium, turned over to a trustee, and held by him until maturity, there will be a book loss of the difference between the inventory value and par. But this loss is to be borne by principal, for the principal is

not considered to be impaired if it contains the actual assets left by the decedent, or the proceeds of these assets.

But, contrary to the general theory of charging losses to principal, if the trustee purchases bonds at a premium, the premium should be amortized, and the life tenant should receive income equal to the coupons minus the amortization. In other words, the whole amount paid by the trustee as premium will be taken out of the interest collections, and the life tenant will receive the balance.

Accounting for cash.—The executor should keep his records in such a manner as to distinguish between principal cash and income cash This is easily accomplished by using a three-column cash book, as follows:

Receipts

	Principal	Income	Total
Cash per inventory	$10,000 00		$10,000 00
Interest on bonds	100 00	$200 00	300 00

Payments

	Principal	Income	Total
Debts of Decedent	$ 300 00		$ 300 00
Expense—Income		$ 35 00	35 00
Distributions of Income Cash		100 00	100 00

The balance of the Total columns shows the total cash in bank or on hand. The balances of the Principal and Income columns show how much of the cash belongs to the principal of the estate and how much belongs to income.

Illustration of Estate Accounting

George Henderson died on March 31, 1933, leaving a will in which he named W C. Turner as executor and trustee without bond, and in which he disposed of his property as follows:

Home and household furniture, and $10,000 00 in cash, to his widow.

Bonds of *X Y* Company, amounting to $1,000.00, to W. C Turner, in lieu of fees as executor and trustee.

All of the remaining property in trust, the income to be paid to his widow during her life, and at her death the principal to be paid to the Carmody Foundation.

The executor was directed to dispose of the testator's summer home, and to add the proceeds of the sale to the trust fund.

Entries*	Dates	Events
	April 10	The will was admitted to probate, and letters testamentary were issued to W C Turner
J 1 } C.R. 1 }	April 15	The executor filed the following inventory with the court:

Real Estate—Home	$15,000 00
Household Furniture	3,000 00
Summer Home	5,000 00
X Y Co Bonds, 6%, F & A	1,000 00
Accrued Interest	10 00
Stock of *P Q* Co —100 shares	10,000 00
Dividends declared March 10, payable April 30	600 00
S T Bonds, 6%, F & A	25,000 00
Accrued Interest	250 00
Automobile	1,500 00
Insurance Policies payable to Estate	20,000 00
Cash	700 00
	$82,060 00

C.R 2	April 16	The executor collected the $20,000 00 life insurance policies
J 2	" 17	The executor turned over the home and household furniture to the widow as a legacy.
C D 1	" 18	Paid funeral expenses, $300 00.
C D. 2, 3	" 30	The executor purchased $5,000.00 *L M* Company 6% bonds, F. & A, with $75 00 accrued interest
C.R 3	" 30	Collected $600.00 dividends on *P Q* Company stock.
C.D 4	May 1	Paid a $10,000.00 cash legacy to the widow.
C R 4 } J. 3 }	" 5	Sold the automobile for $1,200 00
C.R 5	" 10	Discovered a savings bank account with a balance of $450 00. Withdrew this balance and deposited it in the checking account
C D 5	" 15	Paid taxes assessed prior to decedent's death, $260 00
C.R 6, 7	Aug 1	Collected $30.00 interest on *X Y* Company bonds. The $10 00 accrued interest at the testator's death is corpus, and since these bonds are a specific legacy, the $20.00 accrued since is a part of the legacy.

* J, C R, and C D refer to the journal (pages 480 and 482), cash receipt book (page 481), and cash disbursements book (page 481) The numbers refer to the entries in these books

Entries	Dates	Events
C R 8	Aug.	1—Collected $750.00 interest on *S T* Company bonds.
C.R. 9	"	1—Collected $150 00 interest on *L M* Company bonds
C.D. 6	"	5—Paid $500 00 to the widow out of income
J. 4	Sept	10—Dividends of $500 00 were declared on the *P Q* Company stock, payable November 5
C D. 7	"	20—Paid all liabilities filed against the estate, totaling $3,100 00.
C.D. 8	"	22—Total administration expenses paid, $235 00
C.R 10	Oct	5—Cash receipts from crops raised on summer home, $250 00
C.D. 9	"	7—Cash payments for expenses of raising crops, $110.00.
C.R 11 } J. 5 }	"	15—Sold the summer home for $5,800 00.
J. 6 } C.D. 10 }	"	20—The executor took the *X Y* Company bonds and $20.00 of the interest collected on August 1, in payment of his legacy.
J. 7	"	31—The executor recorded the accrued interest on the *S T* Company bonds, and the *L M* Company bonds preparatory to making his final report to the court as of this date.
		The books were posted and a trial balance was taken. (The reader is advised to post the journal and cash book entries to skeleton ledger accounts, and compare the balances with the trial balance on page 482.)

Executor's Journal

(1) April 15	Real Estate—Home	15,000.00	
	Household Furniture.	3,000 00	
	Real Estate—Summer Home	5,000 00	
	X Y Co Bonds—F & A—6%	1,000 00	
	Accrued Interest Receivable	10 00	
	P Q Co. Stock	10,000 00	
	Dividends Receivable	600 00	
	S T Co Bonds—F & A—6%	25,000 00	
	Accrued Interest Receivable	250 00	
	Automobile	1,500 00	
	Insurance Policies	20,000 00	
	Estate Corpus		81,360 00
	To spread the inventory on the books		
(2) April 17	Legacy—Mary Henderson	18,000 00	
	Real Estate—Home		15,000 00
	Household Furniture		3,000 00
	Satisfaction of specific legacy		

Executor's Cash Receipts

					Income	Principal	Total
(1)	April	15	Estate Corpus	Per Inventory		700 00	700 00
(2)		16	Insurance Policies.	Collected		20,000 00	20,000 00
(3)		30	Dividends Receivable	On *P Q* Co stock		600 00	600 00
(4)	May	5	Automobile	See journal for $300 00 loss		1,200 00	1,200 00
(5)		10	Assets Not Inventoried.	Savings bank account		450 00	450 00
(6)	Aug	1	Accrued Interest Receivable	*X Y* bonds to March 31		10 00	10 00
(7)		1	Legacy—W C Turner	*X Y* bond interest since March 31		20 00	20 00
(8)		1	Interest on *S T* Co Bonds*		500 00	250 00	750 00
(9)		1	Interest on *L M* Co Bonds*		75 00	75 00	150 00
(10)	Oct	5	Income	Crops from summer home	250 00		250 00
(11)		15	Summer Home	See journal for $800 00 gain		5,800 00	5,800 00
					825 00	29,105 00	29,930 00

Executor's Cash Disbursements

					Income	Principal	Total
(1)	April	18	Funeral and Administration Expense	Funeral expense		300 00	300 00
(2)		30	*L M* Co Bonds	Purchased at par		5,000 00	5,000 00
(3)		30	Accrued Interest Receivable.	On above bonds		75 00	75 00
(4)	May	1	Legacy—Mary Henderson	Paid by permission of court		10,000 00	10,000 00
(5)		15	Debts of Decedent	Taxes		260 00	260 00
(6)	Aug	5	Distributions of Income Cash	Payment to widow	500 00		500 00
(7)	Sept	20	Debts of Decedent	Per schedule		3,100 00	3,100 00
(8)		22	Funeral and Administration Expense	Expenses of executor		235 00	235 00
(9)	Oct	7	Expense—Income	Expense of raising crops	110 00		110 00
(10)		20	Legacy—W C Turner	Interest on *X Y* Co bonds		20 00	20 00
		31	Balance		215 00	10,115 00	10,330 00
					825 00	29,105 00	29,930 00

* Amounts in the Principal column should be posted to Accrued Interest Receivable, amounts in the Income column should be posted to Income Account

			Debit	Credit
(3) May 5	Loss on Realization		300 00	
	Automobile			300 00
	Sale of auto inventoried at	$1,500 00		
	Price received	1,200 00		
	Loss	$ 300 00		
(4) Sept 10	Dividends Receivable		500 00	
	Income			500 00
	Dividends declared on *P Q* Co stock, payable November 5			
(5) Oct 15	Summer Home		800 00	
	Gain on Realization			800 00
	Home sold for	$5,800 00		
	Inventoried at	5,000 00		
	Gain	$ 800 00		
(6) Oct 20	Legacy—W C Turner		1,000 00	
	X Y Co Bonds			1,000 00
	Payment of specific legacy. See cash book entry for interest			
(7) Oct 31	Accrued Interest Receivable		450 00	
	Income			450 00
	3 months' int on *S T* bonds	$375 00		
	3 months' int. on *L M* bonds	75 00		

Trial Balance

October 31, 1933

(Before making report to court and before closing books)

Estate Corpus		$82,060 00
Assets Not Inventoried		450 00
P Q Co Stock	$10,000 00	
S T Co Bonds	25,000 00	
L M Co Bonds	5,000 00	
Accrued Interest Receivable	450 00	
Dividends Receivable	500 00	
Loss on Realization	300 00	
Gain on Realization		800 00
Funeral and Administration Expense	535 00	
Debts of Decedent	3,360 00	
Legacy—Mary Henderson	28,000 00	
Legacy—W C Turner	1,000 00	
Income		1,775 00
Expense—Income	110 00	
Distributions of Income Cash	500 00	
Cash—Principal	10,115 00	
Cash—Income	215 00	
	$85,085 00	$85,085 00

Alternative procedure.—Some trust companies do not keep formal double entry records for each estate or trust.

Cash transactions are recorded in a Cash account for the estate or the trust, and securities and other assets are carried on a memorandum basis, without dollar values, until disposed of, when the proceeds are taken up in the Cash account. The report to the court is made from the Cash account and from the supplementary memorandum records as to assets not realized.

Trust companies following this procedure do not assign, in the inventory, any cash values to assets the ultimate realizable value of which cannot be exactly ascertained, consequently their records and reports do not show, as a gain or a loss, the difference between an inventory value and the proceeds ultimately realized.

CHAPTER 56

ESTATES AND TRUSTS (Concluded)

Charge and discharge statements.—The charge and discharge statement is a convenient form in which to report to a court the activities of an executor or a trustee. Two charge and discharge statements should be submitted—one as to income, and one as to principal.

Statement as to income.—The charge and discharge statement as to income will contain information as indicated below:

ESTATE OF RICHARD ROE
JOHN DOE, EXECUTOR
Charge and Discharge Statement as to Income
From (Date of Appointment) To (Date of Statement)

I CHARGE MYSELF WITH		
(List all income earned since the decedent's death, classified as interest, dividends, rents, etc The total should agree with the balance of the Income account in the ledger) . . .		$
Total Charges		$
I CREDIT MYSELF WITH.		
(List all expenses chargeable to income)	$	
Payments of Income Cash to Beneficiaries (List beneficiaries and amounts paid)	$	
Total Credits		$
BALANCE		$

If the statement is a final accounting, all of the net income will have been distributed, and the charges and credits will be equal.

Statement as to principal.—The charge and discharge statement as to principal will contain information of the nature indicated on the following page.

If the statement is made as a final accounting to the court, all of the assets should have been distributed The asset accounts will have been closed out of the ledger, and the charges and credits in the statement will agree in totals, so

that there will be no balance in the charge and discharge statement.

ESTATE OF RICHARD ROE
JOHN DOE, EXECUTOR
Charge and Discharge Statement as to Principal
From (Date of Appointment) To (Date of Statement)

I CHARGE MYSELF WITH		
Assets per Inventory (Schedule A)		$
(The total of the assets listed in the inventory should agree with the credit balance of the Estate Corpus account.)		
Assets Subsequently Discovered (Schedule B)		$
(The total of this schedule should agree with the credit balance of the Assets Not Inventoried account.)		
Gain on Assets Realized (Schedule C)		$
(This schedule should describe the property sold, and should have four money columns to show inventory or appraised value, price realized, loss on realization, and gain on realization. The total of the gain column is the amount to insert at this place in the statement, and it should agree with the balance of the Gain on Realization account in the ledger.)		
Total Charges		$
(This total shows the amount of the principal or corpus of the estate which has come into the executor's possession, and for which he must account. He accounts for the total as shown below.)		
I CREDIT MYSELF WITH		
Funeral and Administration Expense (Schedule D)	$	
(This schedule will consist of an analysis of the account of the same title in the ledger.)		
Debts of Decedent Paid (Schedule E)	$	
(This schedule will contain a list of debts paid, as shown by the ledger account.)		
Loss on Assets Realized (Schedule C)	$	
(See explanation of this schedule above. The total will agree with the Loss on Realization column of Schedule C.)		
Payments of Legacies (Schedule F)	$	
(This schedule should show total legacies, inheritance taxes paid thereon, if any, and payments to legatees.)	$	
Total Credits		$
BALANCE (Per Schedule G)		$
(This schedule should show the assets belonging to the corpus of the estate, still in the executor's possession, and should agree with the open asset accounts.)		

Cash account.—The report to the court should usually contain a statement of the Cash account, in three columns,

showing, with respect to both receipts and disbursements, the amounts applicable to principal, the amounts applicable to income, and the totals thereof.

Closing the books.—After the executor has paid all of the debts, distributed all of the assets, and made his final accounting to the court, his books may be closed. One set of closing entries should be made for the corpus, or principal, accounts, and another set of entries for the income accounts.

The entries as to principal accounts should be:

Assets Not Inventoried	$	
Estate Corpus		$
To credit the Corpus account with assets discovered after making the inventory (The Estate Corpus account will thus be credited with the inventory and with the assets subsequently discovered)		
Gain on Realization	$	
Estate Corpus		$
Estate Corpus	$	
Loss on Realization		$
(After these two entries have been made, the credit balance of the Corpus account will show the amount realized from the assets)		
Estate Corpus	$	
Debts of Decedent		$
Estate Corpus	$	
Funeral and Administrative Expense		$
Estate Corpus	$	
Legacy Accounts		$

All of the accounts with the principal of the estate, including the Estate Corpus account, will now be closed. The accounts as to income are closed by the following entry:

Income	$	
Expense—Income		$
Distributions of Income Cash		$
(This will close the Income accounts because all income collected must have been either paid out in expense or distributed to the beneficiaries)		

If the termination of the estate involves the transfer of estate assets to a trustee, the closing entries will include entries debiting the trustee and crediting the transferred assets. Such entries are shown in the following illustration.

Illustration continued.—The following statements and closing entries are based upon the accounts of the estate of George Henderson. The transactions, books of original entry, and trial balance are shown in the preceding chapter.

Statements.—The report to the court will include a transcript or a summary of the cash book (see page 481) and the following exhibits and schedules:

ESTATE OF GEORGE HENDERSON
W. C. TURNER, EXECUTOR
Charge and Discharge Statement as to Principal
March 31, 1933 to October 31, 1933

I CHARGE MYSELF WITH		
Assets per Inventory (Schedule A)	$82,060 00	
Assets Subsequently Discovered (Schedule B)	450 00	
Gain on Realization (Schedule C)	800 00	
Total		$83,310 00
I CREDIT MYSELF WITH		
Funeral and Administration Expense (Schedule D)	$ 535 00	
Debts of Decedent Paid (Schedule E)	3,360 00	
Losses on Assets Realized (Schedule C)	300.00	
Legacies Paid (Schedule F)	29,000 00	
Total		33,195 00
BALANCE AS TO PRINCIPAL		$50,115 00
Consisting of		
P Q Co Stock	$10,000 00	
S T Co. Bonds	25,000 00	
L M Co. Bonds	5,000 00	
Cash	10,115 00	
Total	$50,115 00	

Inventory of Assets — Schedule A
March 31, 1933

Real Estate—Home	$15,000 00
Household Furniture	3,000 00
Real Estate—Summer Home	5,000 00
X Y Co Bonds—F & A, 6%	1,000 00
Accrued Interest thereon	10 00
P Q Co Stock	10,000 00
Dividends declared thereon	600 00
S T Co Bonds—F & A, 6%	25,000 00
Accrued Interest thereon	250 00
Automobile	1,500 00
Insurance Policies	20,000 00
Cash	700 00
	$82,060 00

Assets Subsequently Discovered — Schedule B

Savings Bank Account	$ 450 00

Assets Realized — Schedule C

	Inventory Values	Price Realized	Loss on Realization	Gain on Realization
Summer Home	$ 5,000 00	$ 5,800 00		$ 800.00
Accrued Interest on *X Y* Co Bonds, March 31	10 00	10 00		
Dividends declared on *P Q* Co Stock	600 00	600 00		
Accrued Interest on *S T* Co Bonds, March 31	250 00	250 00		
Automobile	1,500 00	1,200 00	$ 300 00	
Insurance Policies ..	20,000 00	20,000 00		
Total	$27,360 00	$27,860 00	$ 300 00	$ 800 00

Funeral and Administration Expense — Schedule D

Funeral Expenses	$ 300 00
Administration Expenses	235 00
Total	$ 535 00

Debts of Decedent Paid — Schedule E

Taxes Assessed Prior to Death		$ 260 00
Accounts Payable		
John Jones	$ 210 00	
Wm Smith	115 00	
Frank Brown	775 00	1,100.00
Notes Payable.		
First State Bank		2,000 00
Total		$ 3,360 00

Legacies Paid — Schedule F

Mary Henderson		
Home	$15,000 00	
Household Furniture	3,000 00	
Cash	10,000 00	$28,000 00
W C Turner·		
X Y Co Bonds		1,000 00
(Interest earned since Mar 31, $10 00)		
Total		$29,000 00

ESTATE OF GEORGE HENDERSON
W. C. TURNER, EXECUTOR
Charge and Discharge Statement as to Income
March 31, 1933 to October 31, 1933

I CHARGE MYSELF WITH			
Interest on *S T* Co Bonds			
Collected August 1	$750 00		
Less Accrued at March 31	250 00	$ 500 00	
Accrued from Aug 1 to Oct 31		375 00	$ 875.00
Interest on *L M* Co Bonds			
Collected August 1	$150 00		
Less Accrued at Purchase—April 30	75 00	$ 75 00	
Accrued from Aug 1 to Oct 31		75 00	150 00
Dividend on *P Q* Co Stock			
Declared but not collected			500 00
Crops from Summer Home			250 00
Total			$1,775 00
I CREDIT MYSELF WITH:			
Expenses of Raising Crops		$ 110 00	
Distributions of Income Cash		500 00	610 00
BALANCE AS TO INCOME			$1,165 00
Consisting of:			
Dividends Receivable:			
Declared on *P Q* Co Stock		$ 500 00	
Accrued Interest:			
On *S T* Co Bonds		375 00	
On *L M* Co Bonds		75 00	
Cash		215 00	
Total		$1,165 00	

Closing the executor's books.—The executor's cash book contains the following balances

Executor's Cash Receipts

		Income	Principal	Total
Nov 1	Balance	215 00	10,115 00	10,330 00

The following entry should be made to record the transfer of the cash balances to the trustee:

Executor's Cash Disbursements

			Income	Principal	Total
Nov 1	W. C. Turner, Trustee	Transfer to trustee	215	10,115	10,330

The closing of the executor's books is completed by the

following journal entries:

Nov 1	Assets Not Inventoried	450 00	
	Gain on Realization	800 00	
	Estate Corpus		1,250 00
	To close accounts showing increases in corpus		
	Estate Corpus	33,195 00	
	Loss on Realization		300 00
	Funeral and Administration Expense		535 00
	Debts of Decedent		3,360 00
	Legacy—Mary Henderson		28,000 00
	Legacy—W C Turner		1,000 00
	To close accounts showing decreases in corpus		
	W C. Turner, Trustee	40,000 00	
	P Q Co Stock		10,000 00
	S T Co. Bonds		25,000 00
	L M Co Bonds		5,000 00
	To record transfer of residuary legacy to trustee (See cash book entry for transfer of $10,115 00 cash)		
	Estate Corpus	50,115 00	
	W C Turner, Trustee		50,115 00
	To close the two accounts, thus completing the closing entries as to corpus		
	Income	610 00	
	Expense—Income		110 00
	Distributions of Income Cash		500 00
	To close the accounts showing payments out of income		
	W. C Turner—Trustee	950 00	
	Accrued Interest Receivable		450 00
	Dividends Receivable		500 00
	To record transfer of income assets to trustee (See cash book entry for transfer of $215 00 income cash)		
	Income	1,165 00	
	W C Turner, Trustee		1,165 00
	To close the two accounts, thus completing the closing entries as to income		

Opening the trustee's books.—The following cash book and journal entries will open the books of the trustee:

Trustee's Cash Receipts Book

		Income	Principal	Total
Nov 1	Trust Principal		10,115 00	10,115 00
1	Income	215 00		215 00

Trustee's Journal

Nov 1	P Q Co Stock	10,000 00	
	S T Co Bonds	25,000 00	
	L M Co Bonds	5,000 00	
	Trust Principal		40,000 00
	To take up assets as to principal		
	Accrued Interest Receivable	450 00	
	Dividends Receivable	500 00	
	Income		950 00
	To take up assets as to income		

CHAPTER 57

BUDGETS

Nature of a budget.—A budget is an operating and financial program for a future period, based on results attained in prior periods and on data obtained by research and analysis. A budget is developed by:

(1) Making forecasts of such items as:
  (a) Sales.
  (b) Production costs.
  (c) Distribution expenses.
  (d) Administrative expenses.
  (e) Financial expenses.
  (f) Additions to capital assets.
(2) Assembling these forecasts of details into:
  (a) An estimated profit and loss statement for the budget period.
  (b) An estimated statement of cash requirements and sources of receipts to meet such requirements.
  (c) An estimated balance sheet at the end of the budget period.

Length of the budget period.—The budget period should be long enough to allow for seasonal fluctuations in operations and in financial requirements, and for the length of the merchandise turnover period and the production period. If the budget covers too long a period, many unforeseeable conditions having a material effect on operations may arise. A more workable plan can be formulated for a three months' period than for a period of a year. However, there is considerable advantage in having at least a skeleton plan for a year in advance. It is sometimes found desirable to prepare a skeleton budget for a year and a detailed budget for three months. The skeleton budget is used primarily as a basis for general plans and policies, whereas the three months'

budget is used to control the current operations. When the latter method is used, the yearly plan is revised at the end of each quarter to include a year in advance. A yearly budget divided into twelve months, with monthly comparisons, is usually the most successful plan of operation for smaller organizations.

Chapter outline.—In connection with the explanation of budget procedure in this chapter, we shall prepare a budget of The *A B* Company. The company's balance sheet as of December 31, 1934, is presented below, the budget will cover the year 1935.

THE *A B* COMPANY Exhibit A

Balance Sheet—December 31, 1934

Assets

Current Assets			
Cash		$ 350,000	
Receivables	$1,840,000		
Less Reserve for Bad Debts	90,000	1,750,000	
Inventories.			
Finished Goods	$ 623,000		
Goods in Process	150,000		
Raw Materials	400,000	1,173,000	$3,273,000
Deferred Charges			
Factory Supplies		$ 15,000	
Unexpired Insurance		18,000	
Prepaid Interest		7,000	40,000
Fixed Assets.			
Land...		$ 500,000	
Buildings	$2,150,000		
Equipment	3,500,000		
Total	$5,650,000		
Less Reserve for Depreciation	1,350,000	4,300,000	4,800,000
			$8,113,000

Liabilities and Net Worth

Current Liabilities		
Notes Payable—Bank Loans	$ 750,000	
Accounts Payable	180,000	
Accrued Taxes—Local	35,000	
Accrued Taxes—Federal Income	60,000	
Accrued Mortgage Interest	6,250	1,031,250
Mortgage Payable		500,000
Net Worth·		
Preferred Capital Stock	$1,500,000	
Common Capital Stock	3,000,000	
Surplus.	2,081,750	6,581,750
		$8,113,000

To simplify the illustrations, we shall present only the budget for the year as a whole, it should be understood that, for practical use, the budget should be detailed by monthly or quarterly periods.

We shall first present the estimates of details, such as sales, production costs, expenses, and capital expenditures, and shall then note how the details are assembled into the principal budget statements.

Relation of expense and income to cash.—The budget should include a statement of estimated income and expense and a statement of estimated cash receipts and disbursements. These statements will naturally differ because of such matters as depreciation and bad debt reserve provisions, accruals and deferred items, and lags between sales and collections and between purchases and payments. Therefore the estimate of each operating detail should show the amounts to appear in the operating budget and those to appear in the cash budget.

Budgets of Sales and Collections from Customers

Estimated future sales.—In the preparation of a budget, the sales estimate is generally used as the basis, or point of departure, because all of the activities of an enterprise are usually limited by its sales possibilities. However, the sales estimates should not dictate the policies of the general budget program, except in so far as the general budget is limited by the sales possibilities. The sales department sometimes prepares the basic estimates, and all other departments are required to make their programs conform to the sales estimates. However, this procedure does not make for a coordinated program. The original sales estimates should be used as a starting basis only; if the carrying out of these estimates would result in an unbalanced program in the other departments, the sales estimates should be revised until the entire budget covering all departmental activities represents an efficient program of operation for all departments.

The sales estimates should be based on:

(1) A study of past results. The sales department should be furnished with reports showing the sales of the last several years, analyzed by products, salesmen,

branches, geographical divisions, and so forth. These reports should be prepared on a quantity basis rather than on a dollar basis.

(2) A product analysis, showing the extent of the demand for each product, the available gross profit, and the distribution cost; such an analysis may show that some products should be discontinued.

(3) A market survey, based on customer demand and competition in various geographical territories, showing the sales opportunities, and indicating where the future sales can probably be obtained with least resistance

The first sales estimates should be made by the salesmen. Each salesman should be given information, applicable to his territory, regarding past sales; sales opportunities, as indicated by the product analysis and the market survey; and the amount to be spent for advertising. He should also be told the prices which have been tentatively set.

The salesmen's estimates should then be given to the sales executives, who will decide whether to accept or to revise the quotas. No general ratio of increase over last year should be requested; each individual salesman's quota should be considered separately. Last year's sales should be considered as the base in each case, and the amount of any budgeted increase or decrease should be influenced by the ratio of past sales to sales opportunity. In some cases, it will be found conservative not to anticipate any increases in territory that is well covered; and if customers have been overloaded, it may be necessary to consider the possibility of decreases. No salesman should be permitted to undertake a task that is unreasonable, and he should be able to show definitely how he expects to secure his increase. On the other hand, the sales executives should not be satisfied with quotas which are not progressive.

After the final estimates of sales in quantities have been set by the sales executives, it will be necessary to apply the sales prices to the quantities so that the sales may be expressed in terms of both units and dollars.

As a simple illustration, let us assume that The *A B* Company manufactures a single article which it proposes

to sell during 1935 at $50.00 each. The following statement shows the estimates that represent the company's sales budget for the year:

THE *A B* COMPANY Schedule 1
Sales Budget
Year Ending December 31, 1935

Salesman	Units Sold, 1934	1935 Estimates Units	Price	Amount
A	13,500	14,500	$50 00	$ 725,000 00
B	18,500	18,000	50 00	900,000 00
C	20,000	21,500	50 00	1,075,000.00
D	19,500	21,000	50 00	1,050,000 00
E	15,000	16,400	50 00	820,000 00
F	17,500	18,200	50 00	910,000 00
G	15,000	16,000	50 00	800,000 00
Total	119,000	125,600	50 00	$6,280,000 00

Collections from customers.—The method of estimating cash receipts from collections will depend upon the type of business. If all the sales of the business were cash sales, the total of the estimated sales as shown by the sales budget would represent the cash collections. However, this is very seldom the case, and an analysis will show that the collections will usually involve some proportionate lag on sales. This lag may be determined by scheduling the sales by weekly or monthly periods for several prior years and scheduling the collections for the same periods. A graphical presentation of these facts will show the gap between sales and collections.

Another method of determining the relationship between sales and collections is to determine the number of days' billings included in accounts receivable, based upon past experience, as follows:

Computation for The *A B* Company

Sales, 1934	$5,950,000 00
Accounts Receivable, December 31, 1934	1,840,000 00
Per Cent of Sales Uncollected $1,840,000 00 − $5,950,000 00 =	30 92%
Multiplied by	365
Days' Sales Uncollected	113

The cash receipts from collections for The *A B* Company will be estimated as follows:

THE *A B* COMPANY — Schedule 2

Statement of Estimated Collections from Customers

Year Ending December 31, 1935

Receivables, December 31, 1934 (Exhibit A)		$1,840,000 00
Sales for 1935 (Schedule 1)		6,280,000 00
Total		$8,120,000 00
Deduct		
Bad Debts to be Charged to Reserve	$ 50,000 00	
Estimated Receivables, December 31, 1935 $^{113}/_{365}$ of $6,280,000 00.	1,944,000 00	1,994,000 00
Accounts Collected		$6,126,000 00
Probable Discounts Taken, Based on Experience of 75% of Accounts Collected		46,000 00
Cash Collections		$6,080,000 00

The Production Budget

Quantity to be produced.—The number of units of finished goods to be produced during the budget period should be determined on the basis of the estimated sales, the desired closing inventory, and the available inventory at the beginning of the period. Assuming that the inventory of The *A B* Company, at the beginning of 1935, contains 18,500 units, and that it is desired to have 20,500 units on hand at the end of the year, the quantity to be manufactured may be determined as follows:

THE *A B* COMPANY — Schedule 3

Estimate of Quantity of Finished Goods to be Manufactured

Year Ending December 31, 1935

Required to Meet Sales Deliveries (per Schedule 1, page 497)	125,600
Desired for Inventory, December 31, 1935	20,500
Total	146,100
Available in Inventory, January 1, 1935	18,500
Quantity to be Manufactured	127,600

So far as possible, the production program should contemplate an even flow of production during the budget period, in order to avoid wastes due to the changing and training of labor, overtime rates, dissatisfied employees, and so forth.

Material purchases budget.—After the quantity to be manufactured has been determined, it is necessary to estimate the material purchases which must be made in order to meet the production requirements. A specification sheet will be prepared, showing the different kinds and the amounts of

materials required to meet the manufacturing schedule.

The quantities to be purchased will be determined on the basis of these specification sheets, with due consideration of the inventories at the beginning of the period and the desired inventories at the end of the period. One of the major values of a budget lies in the proper coördination of the purchase program and the manufacturing program for the purpose of avoiding excessive and unbalanced inventories.

The purchase requirements based upon material specifications, spoilage allowances (if any), and material inventory requirements, may be modified by the amount of material already in goods in process. However, if the goods in process at the beginning of the period represent a normal inventory and if it is expected that a like amount of goods will remain in process at the end of the period, the allowance for goods in process may be ignored.

Assuming that only one item of raw materials is used by The *A B* Company, that there are 20,000 units of this material in the opening inventory, and that it is desired to have 22,500 units in the closing inventory, the material purchase requirements for the year may be budgeted as follows:

THE *A B* COMPANY — Schedule 4

Estimate of Quantity and Cost of Raw Materials to be Purchased
Year Ending December 31, 1935

Required for Finished Goods to be Manufactured (per Schedule 3, page 498)	127,600
Desired for Inventory, December 31, 1935	22,500
Total	150,100
Available in Inventory, January 1, 1935	20,000
Quantity to be Purchased.	130,100
Estimated Unit Cost	$ 20
Estimated Total Cost	$2,602,000

The purchases should be apportioned to the various months, with consideration of the following factors.

(1) Minimum inventory requirement to meet manufacturing program
(2) Maximum inventory allowable.
(3) Purchasing economies.
(4) Quantity which constitutes an economical buy.
(5) Distance from source of supply.
(6) Available storeroom space.

Estimated payments to material suppliers.—The payments to material suppliers are estimated as follows.

THE *A B* COMPANY — Schedule 5

Estimate of Payments on Accounts Payable

Year Ending December 31, 1935

Accounts Payable, December 31, 1934 (Exhibit A)	$ 180,000
Purchases (Schedule 4)	2,602,000
Total	$2,782,000
Deduct Estimated Accounts Payable, December 31, 1935, Representing Estimated December Invoices	200,000
Accounts to be Paid	$2,582,000
Probable Discounts to be Taken, Based on Experience of 1 6% of Accounts Paid	41,300
Cash Payments	$2,540,700

The labor budget.—The direct labor cost for the manufacture of 127,600 units (see Schedule 3, page 498) is estimated in the following schedule, on the basis of the estimated labor cost in each of the manufacturing departments.

THE *A B* COMPANY — Schedule 6

Estimated Direct Labor Cost

Year Ending December 31, 1935

Department	Quantity to be Produced	Standard Labor Cost Per Unit	Total Estimated Labor Cost
1	127,600	$ 90	$115,000 00
2	127,600	1 60	204,000 00
3	127,600	1 12	143,000 00
4	127,600	1 75	223,000 00
5	127,600	1 30	166,000 00
	127,600	$6 67	$851,000 00

It is assumed that the direct labor costs will be paid in full during the year; the cash disbursements will therefore be equal to the operating charge.

The manufacturing expense budget.—Certain elements of manufacturing expense are fixed charges which will not vary with production; the amounts of other expenses will vary with the quantity of production. In preparing the manufacturing expense budget, it is necessary to have available information concerning the actual manufacturing expenses during prior periods, the relation of these expenses to quantities produced, and the production schedule contemplated by the budget.

Some of the manufacturing expenses will be paid when incurred. Others will not. Depreciation will be provided by credits to reserves, indirect materials will be charged to stores when purchased, and to expense when used; insurance will be charged to a prepaid expense account and written off on the basis of expirations, taxes will be set up in an accrued account, to which payments will subsequently be charged.

The manufacturing expenses and the cash payments therefor are estimated as follows:

THE *A B* COMPANY — Schedule 7

Estimated Manufacturing Expenses

Year Ending December 31, 1935

	1934 Actual	1935 Estimates: Expense	Increase (Decrease*): Inventories	Deferred Charges	Accrued Expense	Reserves	Cash
Indirect Labor	$180,000	$185,000					$185,000
Indirect Material	93,000	112,600	$3,500				116,100
Light, Heat, and Power.	67,000	75,000					75,000
Repairs to Equipment	65,000	68,000					68,000
Depreciation	330,000	350,000				$350,000	
Taxes	32,000	36,000			$1,000		35,000
Insurance	25,000	27,000		$2,000			29,000
Factory Office Expense	18,000	18,000					18,000
Total	$810,000	$871,600	$3,500	$2,000	$1,000	$350,000	$526,100

Budget of Cost of Goods to be Sold

Estimates already made.—Thus far the following items to be used in the statement of the estimated cost of goods to be sold during 1935, appearing on page 502, have been determined:

Manufacturing costs.	
Material purchases (Schedule 4, page 499)	$2,602,000 00
Direct labor (Schedule 6, page 500)	851,000 00
Manufacturing expense (Schedule 7, above)	871,600 00
Raw materials inventories:	
January 1—20,000 units at $20 00 each (Exh A, page 494)	400,000 00
December 31—22,500 units at $20 00 each (Schedule 4)	450,000 00
Goods in process inventories:	
January 1 (Exhibit A)	150,000 00
December 31 (assuming no change)	150,000 00
Finished goods inventories.	
January 1—18,500 units (Exhibit A).	623,000 00
December 31—20,500 units (Schedule 3, page 498).	?

The value of the December 31 inventory of finished goods is estimated on the basis of manufacturing costs for 1935, as determined by the estimates presented on the foregoing pages and summarized as follows:

Estimate of Inventory Value
December 31, 1935

Materials:	
Inventory, January 1	$ 400,000 00
Purchases	2,602,000 00
Total	$3,002,000 00
Less inventory, December 31	450,000 00
Materials used	$2,552,000 00
Direct labor	851,000 00
Manufacturing expense	871,600 00
Total	$4,274,600 00
Units to be manufactured	127,600
Unit cost	$ 33 50
Units in December 31 inventory	20,500
Inventory value	$ 686,750 00

Forecast of cost of sales.—On the basis of this data, the cost of goods to be sold during 1935 may be estimated as follows:

THE *A B* COMPANY — Schedule 5

Statement of Estimated Cost of Sales
Year Ending December 31, 1935

Raw Materials:		
Inventory, January 1	$ 400,000 00	
Purchases	2,602,000 00	
Total	$3,002,000 00	
Less Inventory, December 31	450,000 00	
Materials Cost		$2,552,000 00
Direct Labor		851,000 00
Manufacturing Expense		871,600 00
Total		$4,274,600 00
Variation of Goods in Process Inventory		
January 1	$ 150,000 00	
December 31	150,000 00	
Variation		—
Cost of Goods Manufactured		$4,274,600 00
Variation of Finished Goods Inventory		
January 1	$ 623,000 00	
December 31	686,750 00	
Increase		63,750 00
Cost of Sales		$4,210,850 00

Selling and Administrative Expense Budgets

Fixed and variable expenses.—The expenses should be estimated on the basis of the amounts for prior years, modified by any changes which are likely to result from the change in sales. Therefore, in making the estimates, it is desirable to divide the expenses into two groups. Fixed, or expenses that are not likely to be affected greatly by changes in sales, and variable, or expenses likely to increase or decrease with the sales.

Some of the methods of increasing the sales are.

(1) Increasing sales price, unit sales remaining the same.
(2) Increasing unit sales by:
 (a) Selling more goods to present customers.
 (b) Seeking new customers.
(3) Spending more for advertising and sales promotion.
(4) Hiring additional salesmen.
(5) Requiring additional volume from present salesmen.
(6) Seeking larger volume per order.

The methods to be employed in increasing sales volume have a direct bearing on the classification of expenses as fixed and variable, and this fact should therefore be kept in mind when the expense budgets are made up. If it is proposed to increase the sales by increasing sales prices—unit sales remaining the same,—there should be little variation in salesmen's salaries and traveling expenses, freight out, office expenses, bad debts, and so forth; but advertising and promotion expense may increase, in order to overcome sales resistance. If it is proposed to increase sales by increasing the number of units sold, particularly if this is to be accomplished by adding to the sales force and seeking new customers, most of the selling expenses and some of the administrative expenses will necessarily increase.

Selling expense budget.—Following is the estimate of selling expenses of The *A B* Company for 1935 All of these expenses will be paid in the month in which they are incurred, except advertising, which will be paid in the subsequent month; the unpaid advertising bill at the end of 1935 is estimated at $30,000.00.

THE *A B* COMPANY

Schedule 9

Statement of Estimated Selling Expenses
Year Ending December 31, 1935

	1934 Actual	1935 Estimate Expense	Accounts Payable	Cash
Sales Management Salaries	\$ 33,000	\$ 35,000		\$ 35,000
Rent of Sales Offices	28,000	28,000		28,000
Sales Clerical Expense	18,000	18,000		18,000
Salesmen's Salaries	350,000	375,000		375,000
Delivery Expenses	93,000	95,000		95,000
Sales Commissions and Bonuses	60,000	65,000		65,000
Advertising	215,000	252,000	\$30,000	222,000
Traveling Expenses	90,000	85,000		85,000
Total	\$887,000	\$953,000	\$30,000	\$923,000

In addition to this general budget, a separate budget should be prepared, showing the amount of expenditures allowed each of the sales territories, and the amount allowed the general sales office. The sum of these territorial and general allotments will agree with the aggregate budgeted in Schedule 9. All of these budgets should be apportioned by months, so that frequent comparisons can be made of the budgeted and the actual expenses.

Administrative expenses.—The theory of budgetary control can be applied very effectively to the administrative expenses of a business. Control of the administrative expenses within certain bounds very often is the deciding factor in producing a profit. Following is the administrative expense budget of The *A B* Company.

THE *A B* COMPANY

Schedule 10

Statement of Estimated Administrative Expenses
Year Ending December 31, 1935

	1934 Actual	1935 Estimate Expense	Reserves	Cash
Management Salaries	\$ 90,000 00	\$ 95,000 00		\$ 95,000 00
Depreciation	31,000 00	35,000 00	\$35,000 00	
Rent	25,000 00	25,000 00		25,000 00
Corporate Expenses	30,000 00	35,000 00		35,000 00
Office Salaries	82,000.00	85,000 00		85,000 00
Office Supplies	14,000 00	14,000 00		14,000 00
Communication	12,000 00	12,000 00		12,000 00
Traveling	7,500 00	9,000 00		9,000 00
Bad Debts	52,000 00	60,000 00	60,000 00	
Total	\$343,500 00	\$370,000 00	\$95,000.00	\$275,000 00

Additions to Capital Assets

Relation to cash and operating budgets.—The contemplated additions to capital assets must necessarily be determined before the budget of cash receipts and disbursements can be prepared, because the additions to capital assets will involve expenditures which will have to be reflected in the statement of estimated cash disbursements. Moreover, if any additional securities are to be issued to finance the capital expenditures, the interest charges on these securities must be reflected in the operating budget and the cash budget.

The estimates of capital additions should be made by the plant superintendent and the purchasing department, after a consideration of the production budget and the plans for subsequent expansion.

Following is the summary of the budget of plant additions of The *A B* Company:

THE *A B* COMPANY Schedule 11

Statement of Estimated Additions to Capital Assets

Year Ending December 31, 1935

Land	$ 100,000 00
Buildings	750,000 00
Equipment	450,000 00
Total—To Be Paid in Cash	$1,300,000 00

Financial Budget

Bank loans and securities.—The proposed changes in bank loans, mortgages, and stock issues are shown below:

THE *A B* COMPANY Schedule 12

Estimated Changes in Loans, Mortgages, and Stock

Year Ending December 31, 1935

	Balances, December 31, 1934	Changes: Increases	Changes: Decreases	Balances, December 31, 1935
Bank Loans:				
Present	$ 750,000		$750,000	
New		$ 900,000		$ 900,000
Mortgage				
On Old Plant—5%	500,000			500,000
On New Plant—6%		250,000		250,000
Capital Stock				
Preferred	1,500,000	500,000		2,000,000
Common	3,000,000			3,000,000
	$5,750,000	$1,650,000	$750,000	$6,650,000

Interest.—The interest expense for 1935 is estimated as follows:

Notes Payable, January 1, 1935	$ 750,000 00	
Notes Payable, December 31, 1935	900,000 00	
Total	$1,650,000 00	
Average Notes Payable.	$ 825,000 00	
Interest at 6½%		$53,625 00
Mortgage Payable—Old	500,000 00	
Interest at 5%.		25,000 00
Mortgage Payable to be Dated March 31, 1935	250,000 00	
Interest at 6%		11,250 00
Total		$89,875 00

The interest expense charges and the cash payments therefor will differ because of the prepaid interest on bank loans and the accrued interest on mortgages at the beginning and the end of the year.

THE *A B* COMPANY — Schedule 13

Estimated Interest Expenses

Year Ending December 31, 1935

		Prepaid		Accrued		
	Expense	January 1	December 31	January 1	December 31	Cash
Interest on Bank Loans	$53,625	$7,000	$9,000			$55,625
Interest on Mortgages						
Old	25,000			$6,250	$ 6,250	25,000
New	11,250				3,750	7,500
Total	$89,875	$7,000	$9,000	$6,250	$10,000	$88,125

Dividends.—The proposed dividends for the year on preferred and common stocks are shown below:

THE *A B* COMPANY — Schedule 14

Statement of Estimated Dividend Payments

Year Ending December 31, 1935

	Par of Stock	Rate	Amount
Preferred	$2,000,000 00	7%	$140,000 00
Common	3,000,000 00	8	240,000 00
Total			$380,000 00

Federal income tax.—Federal income tax accruals and payments are estimated in the schedule on the following page.

THE *A B* COMPANY Schedule 15

Estimated Income Tax Payments and Accruals
Year Ending December 31, 1935

Tax Accrued for 1934—To be Paid	$60,000 00
Estimated Tax Accrual for 1935	$78,000 00

Assembling the Budgets

Working papers.—The opening balance sheet is entered in the working papers (see pages 509 to 514), and the budget estimates are journalized and posted thereto.

Schedule			
1	Receivables	6,280,000 00	
	Sales		6,280,000 00
	Estimated sales		
2	Cash	6,080,000 00	
	Discount on Sales	46,000 00	
	Reserve for Bad Debts	50,000 00	
	Receivables		6,176,000 00
	Collections, discounts, and write-offs		
4	Purchases—Raw Materials ..	2,602,000 00	
	Accounts Payable		2,602,000 00
	Material purchases		
5	Accounts Payable .	2,582,000 00	
	Discount on Purchases		41,300 00
	Cash		2,540,700 00
	Payments to material suppliers		
6	Direct Labor . ..	851,000 00	
	Cash.		851,000 00
	Payments for direct labor		
7	Manufacturing Expense:		
	Indirect Labor	185,000 00	
	Indirect Material	112,600 00	
	Light, Heat, and Power	75,000 00	
	Repairs to Equipment	68,000 00	
	Depreciation	350,000 00	
	Taxes	36,000 00	
	Insurance	27,000 00	
	Factory Office Expense .	18,000 00	
	Factory Supplies (Inventory increase)	3,500 00	
	Prepaid Insurance (Increase) .	2,000 00	
	Accrued Taxes (Increase)		1,000 00
	Reserve for Depreciation		350,000 00
	Cash .		526,100 00
	Finished Goods	686,750 00	
	Goods in Process .	150,000 00	
	Raw Materials	450,000 00	
	Profit and Loss .		1,286,750 00
	Inventories at end of year		

Schedule			
9	Sales Management Salaries	35,000 00	
	Rent of Sales Office	28,000 00	
	Sales Clerical Expense	18,000 00	
	Salesmen's Salaries	375,000 00	
	Delivery Expenses	95,000 00	
	Sales Commissions and Bonuses	65,000 00	
	Advertising	252,000 00	
	Traveling Expenses	85,000 00	
	Accounts Payable		30,000 00
	Cash		923,000 00
10	Management Salaries	95,000 00	
	Depreciation	35,000 00	
	Rent	25,000 00	
	Corporate Expenses	35,000 00	
	Office Salaries	85,000 00	
	Office Supplies	14,000 00	
	Communication	12,000 00	
	Traveling Expenses	9,000 00	
	Bad Debts	60,000 00	
	Reserve for Depreciation		35,000 00
	Reserve for Bad Debts		60,000 00
	Cash		275,000 00
11	Land	100,000 00	
	Buildings	750,000 00	
	Equipment	450,000 00	
	Cash		1,300,000 00
12	Bank Loans	750,000 00	
	Cash		750,000 00
	Payment of present loans		
	Cash	1,650,000 00	
	Bank Loans		900,000 00
	Mortgage Payable—New		250,000 00
	Preferred Capital Stock		500,000 00
	Loans, and securities issued		
13	Interest on Bank Loans	53,625 00	
	Interest on Mortgages	36,250 00	
	Prepaid Interest (Increase)	2,000 00	
	Accrued Interest (Increase)		3,750 00
	Cash		88,125 00
	Interest expense and payments		
14	Dividends on Preferred Stock	140,000 00	
	Dividends on Common Stock	240,000 00	
	Cash		380,000 00
15	Accrued Taxes—Federal Income	60,000 00	
	Cash		60,000 00
	Payment of 1934 tax		
	Federal Income Tax	78,000 00	
	Accrued Taxes—Federal Income		78,000 00
	Estimated accrual for 1935		

Sheet 1

THE *A B* COMPANY
Working Papers
Estimated Statement of Cost of Goods Manufactured and Sold
Year Ending December 31, 1935

	Balances, December 31, 1934		Journal Entries		Statement	
	Debit	Credit	Debit	Credit		
Raw Materials						
Inventory—December 31, 1934	400,000				400,000	
Purchases			2,602,000(4)		2,602,000	
Total					3,002,000	
Inventory—December 31, 1935				450,000(8)	450,000	
Materials Used						2,552,000
Direct Labor			851,000(6)			851,000
Manufacturing Expenses						
Indirect Labor			185,000(7)		185,000	
Indirect Material			112,600(7)		112,600	
Light, Heat, and Power			75,000(7)		75,000	
Repairs to Equipment			68,000(7)		68,000	
Depreciation			350,000(7)		350,000	
Taxes			36,000(7)		36,000	
Insurance			27,000(7)		27,000	
Factory Office Expense			18,000(7)		18,000	
Total Manufacturing Expense						871,600
Total Material, Labor, and Expense						4,274,600
Inventory Variation—Goods in Process						
Inventory—December 31, 1934	150,000				150,000	
Inventory—December 31, 1935				150,000(8)	150,000	—
Cost of Goods Manufactured						4,274,600
Inventory Variation—Finished Goods						
Inventory—December 31, 1934	623,000				623,000	
Inventory—December 31, 1935				686,750(8)	686,750	
Increase						63,750
Cost of Goods Sold (Forward to Sheet 2)						4,210,850
Totals (Forward to Sheet 2)	1,173,000	—	4,324,600	1,286,750		

THE *A B* COMPANY
Working Papers
Estimated Profit and Loss Statement
Year Ending December 31, 1935

Sheet 2

	Balances, December 31, 1934		Journal Entries		Statement	
	Debit	Credit	Debit	Credit		
Totals (Brought forward from Sheet 1)	1,173,000 00	—	4,324,600 00	1,286,750 00		
Sales				6,280,000 00(1)		6 280,000 00
Cost of Goods Sold (Brought forward from Sheet 1)						4,210,850 00
Gross Profit on Sales						2,069,150 00
Selling Expenses						
Sales Management Salaries			35,000 00(9)		35,000 00	
Rent of Sales Office			28,000 00(9)		28,000 00	
Sales Clerical Expense.			18,000 00(9)		18,000 00	
Salesmen's Salaries			375,000 00(9)		375,000 00	
Delivery Expenses			95,000 00(9)		95,000 00	
Sales Commissions and Bonuses			65,000 00(9)		65,000 00	
Advertising			252,000 00(9)		252,000 00	
Traveling Expenses			85,000 00(9)		85,000 00	
Total Selling Expenses						953,000 00
Net Profit on Sales						1,116,150 00
Administrative Expenses						
Management Salaries			95,000 00(10)		95,000 00	
Depreciation			35,000 00(10)		35,000 00	
Rent			25,000 00(10)		25,000 00	
Corporate Expenses			35,000 00(10)		35,000 00	
Office Salaries			85,000 00(10)		85,000 00	
Office Supplies			14,000 00(10)		14,000 00	
Communication			12,000 00(10)		12,000 00	
Traveling Expenses			9,000 00(10)		9,000 00	
Bad Debts			60,000.00(10)		60,000 00	
Total Administrative Expenses						370,000 00
Net Profit on Operations						746,150 00
Net Financial Expense						
Interest on Mortgages			36,250 00(13)		36,250 00	
Interest on Bank Loans			53,625 00(13)		53,625 00	
Discount on Sales			46,000 00(2)		46,000 00	
Total					135,875 00	
Less Discount on Purchases				41,300 00(5)	41,300 00	
Net Financial Expense						94,575 00
Net Income Before Federal Income Tax						651,575 00
Federal Income Tax			78,000 00(15)			78,000 00
Net Income (Forward to Sheet 3)						573,575 00
Totals (Forward to Sheet 3)	1,173,000 00	—	5,861,475 00	7,608,050 00		

THE *A B* COMPANY
Working Papers
Estimated Surplus Statement
Year Ending December 31, 1935

Sheet 3

	Balances, December 31, 1934		Journal Entries		Statement	
	Debit	Credit	Debit	Credit		
Totals (Brought forward from Sheet 2)	1,173,000		5,861,475	7,608,050		
Surplus—December 31, 1934		2,081,750				2,081,750
Net Income for the Year (Brought forward from Sheet 2)						573,575
Total						2,655,325
Less Dividends:						
On Preferred Stock—7%			140,000(14)		140,000	
On Common Stock—8%			240,000(14)		240,000	380,000
Balance—December 31, 1934 (Forward to Sheet 6)						2,275,325
Totals (Forward to Sheet 6)	1,173,000	2,081,750	6,241,475	7,608,050		

Sheet 4

THE *A B* COMPANY
Working Papers
Estimated Statement of Cash Receipts and Disbursements
Year Ending December 31, 1935

	Balances, December 31, 1934		Journal Entries		Statement	
	Debit	Credit	Debit	Credit		
Balance, December 31, 1934	350,000					350,000
Receipts:						
Accounts Receivable			6,080,000(2)		6,080,000	
Bank Loans			900,000(12)		900,000	
Mortgage on New Plant			250,000(12)		250,000	
Preferred Stock			500,000(12)		500,000	
Total Receipts						7,730,000
Total						8,080,000
Disbursements:						
Material Suppliers				2,540,700(5)	2,540,700	
Direct Labor				851,000(6)	851,000	
Manufacturing Expenses				526,100(7)	526,100	
Selling Expenses				923,000(9)	923,000	
Administrative Expenses				275,000(10)	275,000	
Interest				88,125(13)	88,125	
Federal Income Tax—1934				60,000(15)	60,000	
Bank Loans—December 31, 1934				750,000(12)	750,000	
Dividends						
Preferred Stock				140,000(14)	140,000	
Common Stock				240,000(14)	240,000	
Additions to Capital Assets:						
Land				100,000(11)	100,000	
Buildings				750,000(11)	750,000	
Equipment				450,000(11)	450,000	
Total Disbursements						7,693,925
Balance, December 31, 1935 (Forward to Sheet 5)						386,075
Totals (Forward to Sheet 5)	350,000	—	7,730,000	7,693 925		

THE *A B* COMPANY
Working Papers
Estimated Balance Sheet—Assets
December 31, 1935

Sheet 5

	Balances, December 31, 1934 Debit	Balances, December 31, 1934 Credit	Journal Entries Debit	Journal Entries Credit	Statement	
Current Assets:						
Cash (Brought forward from Sheet 4)	350,000		7,730,000	7,693,925		386,075
Receivables	1,840,000		6,280,000(1)	6,176,000(2)	1,944,000	
Less Reserve for Bad Debts		90,000	50,000(2)	60,000(10)	100,000	1,844,000
Inventories:						
Finished Goods			686,750(8)		686,750	
Goods in Process			150,000(8)		150,000	
Raw Materials			450,000(8)		450,000	1,286,750
Total Current Assets						3,516,825
Deferred Charges:						
Factory Supplies	15,000		3,500(7)		18,500	
Unexpired Insurance	18,000		2,000(7)		20,000	
Prepaid Interest	7,000		2,000(13)		9,000	
Total Deferred Charges						47,500
Fixed Assets						
Land	500,000		100,000(11)		600,000	
Buildings	2,150,000		750,000(11)		2,900,000	
Equipment	3,500,000		450,000(11)		3,950,000	
Total					7,450,000	
Less Reserve for Depreciation		1,350,000		350,000(7) 35,000(10)	1,735,000	
Total Fixed Assets						5,715,000
Total Assets						9,279,325
Totals (Forward to Sheet 6)	8,380,000	1,440,000	16,654,250	14,314,925		

Sheet 6

THE *A B* COMPANY

Working Papers

Estimated Balance Sheet—Liabilities and Net Worth

December 31, 1935

	Balances, December 31, 1934		Journal Entries		Statement	
	Debit	Credit	Debit	Credit		
Totals (Brought forward from Sheet 5)	8,380,000	1,440,000	16,654,250	14,314,925		
Current Liabilities						
Notes Payable—Bank Loans		750,000	750,000(12)	900,000(12)	900,000	
Accounts Payable		180,000	2,582,000(5)	2,602,000(4) 30,000(9)	230,000	
Accrued Taxes—Local		35,000		1,000(7)	36,000	
Accrued Taxes—Federal Income		60,000	60,000(15)	78,000(15)	78,000	
Accrued Mortgage Interest		6,250		3,750(13)	10,000	
Total Current Liabilities						1,254,000
Fixed Liabilities:						
Mortgage Payable—Old		500,000			500,000	
Mortgage Payable—New				250,000(12)	250,000	
Total Fixed Liabilities						750,000
Net Worth:						
Capital Stock:						
Preferred		1,500,000		500,000(12)	2,000,000	
Common		3,000,000			3,000,000	
Total					5,000,000	
Surplus (Brought forward from Sheet 3)		2,081,750			2,275,325	
Total Net Worth						7,275,325
Total Liabilities and Net Worth						9,279,325
(Other totals forward from Sheet 3)	1,173,000		6,241,475	7,608,050		
	9,553,000	9,553,000	26,287,725	26,287,725		

Analysis of the Budgets

Comparisons and ratios.—Before the estimates are finally approved, they should be analyzed by preparing comparative statements and by computing ratios, so that the management may determine whether the contemplated results are satisfactory.

Comparative balance sheet.—The comparative balance sheet with accompanying ratios, presented below, might cause the management to reconsider the entire budget. The student should note the per cents of change in the balance sheet ratios in comparison with the per cent of change in sales, and the decreases in all of the very significant ratios at the foot of the statement.

THE *A B* COMPANY
Condensed Comparative Balance Sheet
December 31, 1934 (Actual) and 1935 (Estimated)

	December 31		Increase (Decrease*)	
	1935	1934	Amount	Per Cent
Assets				
Current Assets.				
Cash	$ 386,075	$ 350,000	$ 36,075	10 31%
Receivables—Net	1,844,000	1,750,000	94,000	5 37
Inventories	1,286,750	1,173,000	113,750	9 70
Total	$3,516,825	$3,273,000	$ 243,825	7 45
Deferred Charges	47,500	40,000	7,500	18 75
Fixed Assets—Net	5,715,000	4,800,000	915,000	19 06
	$9,279,325	$8,113,000	$1,166,325	14 38
Liabilities and Net Worth				
Current Liabilities	$1,254,000	$1,031,250	$ 222,750	21 60
Fixed Liabilities	750,000	500,000	250,000	50 00
Total Liabilities	$2,004,000	$1,531,250	$ 472,750	30 87
Net Worth				
Preferred Stock	$2,000,000	$1,500,000	$ 500,000	33 33
Common Stock	3,000,000	3,000,000	—	—
Surplus	2,275,325	2,081,750	193,575	9 30
Total Net Worth	$7,275,325	$6,581,750	$ 693,575	10 54
	$9,279,325	$8,113,000	$1,166,325	14 38
Sales	$6,280,000	$5,950,000	$ 330,000	5 55%
Working Capital Ratio	2 80	3 17	37*	
Acid Test Ratio	1 78	2 04	26*	
Ratio of Sales to Fixed Assets	1 10	1 24	14*	
Ratio of Net Worth to Fixed Assets	1.27	1.37	10*	
Ratio of Net Worth to Liabilities	3 63	4 30	67*	

Comparative profit and loss statement.—The brief statement on page 517 compares the operation for 1934 with the proposed operations for 1935. Although the statement shows an increase in net income, the management might question the slightly increased ratios of selling and administrative expenses, and particularly the large increase in net financial expense; this latter increase arises largely from increases in fixed expenses, which affect the break-even point and may therefore be dangerous.

Similar comparative statements might be prepared to show the details of manufacturing costs and expenses.

Comparison of actual results with budget estimates.—Periodic comparisons of actual results with the budget estimates should be prepared. These comparisons should be made frequently, so that variations may be determined quickly and any improper variations investigated and corrected if possible.

If actual results indicate that it will be possible to operate within the budget estimates for the period, no revisions will be necessary. However, if results from time to time indicate that the budget estimates are considerably out of line, it will be necessary to revise the budget in order to take into consideration the new problems which have arisen as a result of current operating conditions. The budget should not be revised merely because some department is not meeting the budget requirements, but should be revised only when current conditions necessitate changes in the program of operations.

The periodic comparison of actual results with the budget is one of the most important parts of the budget program and is the chief means of enforcing the budget.

Classification of accounts.—To make the comparison of the actual results with the budget estimates of greatest value, it is necessary that the classification of accounts used in the budget conform to the classification of accounts used in reporting the actual results.

If the proper control of the business is to be exercised through the accounts, the classification of accounts should be so designed that for every person in the business who has power to requisition materials, labor, or funds, there will be a separate account or group of accounts showing what his

THE *A B* COMPANY

Condensed Comparative Profit and Loss Statement

1934 Actual and 1935 Estimated

	1935 Estimated		1934 Actual		Increase	
	Amount	Per Cent of Sales	Amount	Per Cent of Sales	Amount	Per Cent
Sales	$6,280,000 00	100 00%	$5,950,000 00	100 00%	$330,000 00	5 55%
Cost of Goods Sold	4,210,850 00	67 05	4,100,000 00	68 91	110,850 00	2 70
Gross Profit on Sales	$2,069,150 00	32 95%	$1,850,000 00	31 09%	$219,150 00	11 85
Selling Expenses	953,000 00	15 18	887,000 00	14 91	66,000 00	7 44
Net Profit on Sales	$1,116,150 00	17 77%	$ 963,000 00	16 18%	$153,150 00	15 90
Administrative Expenses.	370,000 00	5 89	343,500 00	5 77	26,500 00	7 71
Net Profit on Operations	$ 746,150 00	11 88%	$ 619,500 00	10 41%	$126,650 00	20.44
Net Financial Expense	94,575 00	1 50	73,500 00	1 24	21,075 00	28 67
Net Income Before Federal Income Tax	$ 651,575 00	10 38%	$ 546,000 00	9 17%	$105,575 00	19 34

requisitions have amounted to. Each expenditure should be charged against the account representing the person who has the power to increase, decrease, or eliminate the expenditure. With such a classification, an intelligent study of operating results can be made, and responsibility for desirable and undesirable results can be definitely placed.

CHAPTER 58

PUBLIC ACCOUNTS

Governments and institutions.—Public accounts include accounts of (1) governments and subdivisions thereof, such as the national and state governments, counties, cities, villages, and park, drainage, and school districts, and (2) institutions, such as hospitals, libraries, and universities.

Sources of assets.—The assets recorded in public accounts are derived from the following principal sources

(1) Taxes and other revenues, including licenses, fees, fines, franchises, and service charges.
(2) Loans, on bond issues or otherwise.
(3) Assessments against property owners for improvements.
(4) Grants from superior governments.
(5) Gifts.

Funds.—The authorizations for the levying of taxes or assessments or for the issuance of bonds, stipulate the purposes for which the funds thus obtained may be used. Grants and gifts are usually received subject to definite limitations regarding the uses to be made thereof.

Since each fund is usually available for one designated purpose, it is imperative that a separate group of accounts be kept for each fund, showing the amount of its assets, the liabilities and commitments payable therefrom, and the amount of its surplus, or the excess of the assets over the liabilities and encumbrances of the fund.

The accounts of each fund constitute a complete accounting unit, from which a balance sheet can be prepared. This segregation of the accounts by funds is an important and peculiar feature of public accounts.

Classification of funds.—The following classification of funds is not exhaustive; it merely indicates the nature of

different funds

(I) Expendable funds:
  (1) Revenue funds, derived from taxes or other revenue sources, and used for current operating activities.
    (a) General fund—expendable for all general operating activities of the government or institution.
    (b) Special fund—derived from revenues specifically raised for a particular purpose, such as a hospital, a library, or a park.
  (2) Special assessment funds to be expended for local improvements, the cost of which will be charged, in whole or in part, to the owners of the property that is regarded as benefited by the improvement.
  (3) Bond funds, arising from the sale of bond issues, and to be expended for public improvements.

(II) Working capital or revolving funds, which, although expended, are replenished by the receipts from their operations.

(III) Sinking funds for the payment of bond issues.

(IV) Trust funds. These may be obtained from public or other sources, and are held for particular, designated purposes. Endowment funds, pension funds, and cemetery-care funds held by a city as custodian, are illustrations. Usually, only the income from such funds is expendable.

The nature of these various classes of funds will be clarified by the following discussion and by the illustrations of the accounts reflecting the operations of the funds.

In addition to the accounts with the various funds, a group of accounts should be maintained showing the fixed assets owned and the bond issues that are not direct obligations of particular funds.

The budget.—The operations of expendable revenue funds are controlled by the budget, which shows, with respect to each fund, the authorized estimated revenues and the

approved appropriations for expenditures. A well-prepared budget will usually contain

- Three principal statements (illustrated below):
  - A budget summary.
  - A schedule showing the estimated revenues classified by sources
  - A schedule of appropriations classified by departments.
- Numerous supporting statements, such as:
  - A statement comparing the estimated revenues for the current year and the actual revenues for previous years.
  - A statement comparing the appropriations for the current year and the appropriations for prior years.
  - A statement for each department, showing the appropriations classified according to the objects of the proposed expenditures, such as salaries, office expense, equipment, and repairs.

Budget Summary Schedule A

	General Fund	Special Fund	Total
Unexpended balance (if any) from preceding year, available for expenditure in current year	$ —	$ —	$ —
Estimated revenues (Schedule B)	100,000	30,000	130,000
Total	$100,000	$30,000	$130,000
Appropriations (Schedule C)	98,000	29,000	127,000
Unappropriated Surplus	$ 2,000	$ 1,000	$ 3,000

Estimated Revenues Schedule B

Sources	General Fund	Special Fund	Total
Taxes	$ 71,000	$25,000	$ 96,000
Licenses, fees, etc	29,000	5,000	34,000
Total	$100,000	$30,000	$130,000

Appropriations Schedule C

Departments	General Fund	Special Fund	Total
General Administration	$ 30,000	$20,000	$ 50,000
Police Department	25,000	—	25,000
Public Welfare	8,000	—	8,000
Total	$ 98,000	$29,000	$127,000

Outline of illustration.—The remainder of this chapter consists of illustrative transactions and general ledger entries therefor, applicable to the following typical funds of a municipality:

General fund.	Sinking fund.
Special fund.	Special assessment fund.
Stores fund.	Trust fund.
Bond fund	Property.

Following the explanation of the entries in the general ledger accounts of each fund is a discussion of the subsidiary ledger accounts. Finally, the customary balance sheets and other statements are discussed.

To simplify the illustration, it will be assumed that, at the beginning of the period, there are no balances in any fund accounts, and that the only accounts open on the books of the municipality are the following:

Property (debit balance)	$1,000,000 00
Surplus Invested in Fixed Assets (credit balance)	1,000,000 00

These balances are shown, with the identifying number (1), in the summary (page 547) of the accounts of the Property section of the general ledger.

General Fund

Transactions.—A summary of the general ledger accounts of the General Fund appears on page 528, one column is devoted to each account; debit entries are unstarred; credit entries are starred The entries for the transactions carry numbers that correspond to the numbers in the following statement of assumed facts:

(2) The total estimated revenues for the General Fund for the fiscal year, as shown by the budget on page 521, are $100,000.00. Debit Estimated Revenues; credit Unappropriated Surplus.

(3) The total appropriations shown by the budget are $98,000.00. Debit Unappropriated Surplus; credit Appropriations.

(4) The tax levy for General Fund purposes is $75,000.00; it is estimated that $3,000.00 of this amount will not be collected. Debit Taxes Receivable, $75,000.00; credit Reserve

for Uncollectible Taxes, $3,000.00; credit Estimated Revenues, $72,000.00.

(5) Tax anticipation warrants amounting to $30,000.00 are sold for cash at par. Debit Cash, credit Tax Anticipation Warrants Payable.

(6) Taxes in the amount of $68,000.00 are collected Debit Cash; credit Taxes Receivable.

(7) Tax anticipation warrants in the amount of $20,000.00 are paid. Debit Tax Anticipation Warrants Payable; credit Cash.

(8) A loan of $10,000.00 is made to the Special Fund. Debit Special Fund; credit Cash. (A contra entry in the accounts of the Special Fund is described later.)

(9) A fund is established for the purpose of purchasing stores to be furnished to all other funds as required by their operations; $5,000.00 is transferred to this fund to provide it with working capital. Debit Stores Fund, credit Cash. (A contra entry in the accounts of the Stores Fund is described later.)

(10) Materials are requisitioned from the Stores Fund; the Stores Fund charges the General Fund $1,000.00 for these materials. Debit Appropriations; credit Stores Fund (A contra entry will be made in the accounts of the Stores Fund.)

(11) Cash is transferred to the Stores Fund in payment for these materials. Debit Stores Fund, credit Cash. (A contra entry will be made in the accounts of the Stores Fund)

(12) Commitments are made in the form of orders and contracts in an estimated amount of $20,000.00. These commitments are encumbrances against the appropriations, that is, they reduce the balance which may be used for other purposes; therefore, a memorandum record should be made of the amount thereof, by debiting Appropriation Encumbrances and crediting Reserve for Encumbrances.

(13) Certain materials ordered (see transaction 12) are received, two entries are required:

> (a) The estimated cost of the materials was $14,000.00, and the memorandum entries for the commitment should be reversed. Debit Reserve for Encumbrances, credit Appropriation Encumbrances.

(b) The invoice price of the materials is $15,000.00, and vouchers for that amount are certified. Debit Appropriations; credit Vouchers Payable.

(14) Vouchers totaling $14,000 00 are paid by warrants issued against the treasury Practice differs regarding the accounting for warrants; two methods are in use:

First method: When warrants are issued by the accounting or disbursing department, debit Vouchers Payable and credit Cash.

Second method: When warrants are issued, debit Vouchers Payable and credit Warrants Payable. When paid vouchers are returned by the treasurer to the accounting department, debit Warrants Payable and credit Cash.

Under the first method of accounting, the cash is regarded as reduced immediately by the issuance of the warrant; under the second method, the cash is not regarded as reduced until the warrant has actually been presented to, and paid by, the treasurer. The first method is used in the illustrative entries.

(15) Some of the equipment owned at the beginning of the year is sold for $2,000.00. This cash receipt is not a revenue receipt, but resulted from the conversion of an asset It was not included in the estimated revenues for the period, and therefore it should not be credited to Estimated Revenues. Debit Cash; credit Surplus Receipts. (An entry for the cost of the property disposed of, to be made in the Property group of accounts, will be discussed later.)

(16) A cash payment of $6,000.00 was made for the purchase of equipment; two General Fund entries are required.

(a) For vouchers certified debit Appropriations; credit Vouchers Payable.

(b) For warrants issued. debit Vouchers Payable; credit Cash.

(Entries recording the cost of this property will also be made in the Property group of accounts.)

(17) A cash contribution of $5,000 00 is made to a trust fund, the nature of which is more fully discussed in the

comments relative to the Trust Fund accounts. Debit Appropriations; credit Cash (A contra entry in the Trust Fund accounts is described later)

(18) A $2,000.00 payment is made to the sinking fund. Debit Appropriations, credit Cash. (A contra entry will be found in the Sinking Fund accounts.)

(19) Cash in the amount of $7,000.00 is received from the Special Fund, in partial repayment of the loan made to that fund (transaction 8). Debit Cash; credit Special Fund. (Contra entry in Special Fund accounts.)

It is often desired to prepare balance sheets at interim dates during the period; for the purpose of illustrating such a balance sheet, the balances in the General Fund accounts after transaction 19 are shown in the summary of these accounts on pages 528 and 529.

(20) Licenses, fees, and so forth, are collected in the amount of $29,000.00. Debit Cash; credit Estimated Revenues.

(21) Additional vouchers are certified, as follows:

For previous encumbrances

(a) The original estimate of the encumbrances was $4,000.00; reverse the memorandum entries by debiting Reserve for Encumbrances and crediting Appropriation Encumbrances.

(b) The invoices received agree with the estimate; debit Appropriations and credit Vouchers Payable.

(c) For miscellaneous expenses, amounting to $56,000.00, for which no encumbrances had previously been recorded; debit Appropriations and credit Vouchers Payable.

(22) Warrants amounting to $55,000.00 are issued in payment of vouchers. Debit Vouchers Payable; credit Cash.

(23) A special assessment fund (to be discussed in detail later) has been created for a local improvement; most of the cost of this improvement will be charged to the property owners, however, $10,000.00 of the cost is to be paid from the general fund, as that portion of the cost is regarded as a public benefit; of this amount, $5,000.00 is to be paid during

the current fiscal year. Provision for this expenditure was made in the budget of the General Fund, and the transfer of $5,000 00 in cash to the Assessment Fund should be recorded by a debit to Appropriations and a credit to Cash. (Entries are also required in the Assessment Fund accounts and in the Property accounts.)

(24) A transfer of $1,000.00 in cash is made to the Stores Fund to cover the loss in that fund for the year. Debit Appropriations, credit Cash. (Entry also required in Stores Fund accounts.)

The balances of the general ledger accounts for this fund, after these transactions have been recorded, are shown in the summary on pages 528 and 529.

General ledger and subsidiary accounts.—Before considering the closing entries to be made at the end of the period, it is desirable to comment on the nature of certain general ledger accounts and the subsidiary accounts which support them.

The Estimated Revenues account is debited at the beginning of the period with the total estimated revenues shown by the budget and credited during the period with revenues accrued (with taxes, when levied, with licenses and so forth, when collected). A debit balance indicates that the estimated revenues exceeded the actual revenues, and that the estimated surplus was thus reduced; a credit balance indicates that the actual revenues exceeded the estimates, and that the estimated surplus was thus increased. This account should be supported by a subsidiary ledger containing accounts with each class of revenue, which should be debited with the estimates and credited with the amounts accrued.

The Appropriations account is credited with the total of the appropriations shown by the budget and debited with expenditures made against the appropriations. Appropriation Encumbrances (with a debit balance) and Reserve for Encumbrances (with a credit balance) are memorandum accounts showing commitments made against appropriations. The Appropriations account and the Appropriation Encumbrances account are supported by a subsidiary ledger containing accounts with each department (General Administration, Police, Public Welfare, and so forth) for which appropriations

were made in the budget. The following illustration shows the money columns that should be provided, proper columns for Date, Reference, Name, and so forth, should appear at the left.

General Fund Appropriation for Police Department

	Encumbrances			Appropriations		
	Debit	Credit	Balance Dr —Cr *	Debit	Credit	Balance Dr —Cr *
Budget appropriation					$25,000	$25,000*
Orders placed	$1,000		$1,000			
Vouchers issued		$800	200	$ 850		24,150*
Vouchers issued				3,000		21,150*

The subsidiary account illustrated shows a balance of $21,-150.00 in the appropriation for the Police Department; this balance is subject to an encumbrance of $200.00; therefore the net available balance is $20,950.00. The credit balance in the Appropriations account in the general ledger should agree with the total of all credit balances in the Appropriations section of the subsidiary accounts applicable to the fund; and the debit balance in the Appropriation Encumbrances account in the general ledger should agree with the sum of the debit balances in the Encumbrances section of the subsidiary accounts.

Each departmental Appropriations account in the subsidiary ledger is in turn supported by an account in an expenditure analysis ledger, in which the charges against appropriations are classified according to the object of the expenditure. For example, the subaccount with Police Department Appropriations might be supported by the following expenditure account:

General Fund—Police Department
Analysis of Expenditures

	Salaries	Office Expense	Supplies	Etc	Etc.	Total
January (Summary)	$3,000	$300	$550			$3,850

It will be noted that the total debits of $3,850.00 agree with the total debits in the Appropriations account for the police department. These accounts in the expenditure analysis ledger furnish the information for the periodical statements of expenditures.

The nature of the Tax Anticipation Warrants Payable and

General Fund
Summary of General Ledger Accounts
(000 Omitted)

	Cash	Taxes Receivable	Reserve for Uncollectible Taxes	Special Fund	Stores Fund	Estimated Revenues	Vouchers Payable	Tax Anticipation Warrants Payable	Appropriation Encumbrances	Reserve for Encumbrances	Appropriations	Surplus Receipts	Unappropriated Surplus
(2) Total estimated revenues—per budget						100							100*
(3) Total appropriations—per budget											98*		98
(4) Tax levy		75	3*			72*							
(5) Tax anticipation warrants sold	30							30*					
(6) Taxes collected	68	68*											
(7) Tax anticipation warrants paid	20*							20					
(8) Loan to Special Fund	10*			10									
(9) Advance to Stores Fund	5*				5								
(10) Materials requisitioned from Stores Fund					1*						1		
(11) Cash transferred to Stores Fund in payment of materials	1*				1								
(12) Contracts made and orders placed									20	20*			
(13) Liabilities on vouchers certified													
(a) Estimated encumbrance—reversed									14*	14			
(b) Vouchers certified							15*				15		
(14) Warrants issued	12*						12						
(15) Receipts from sale of equipment	2											2*	
(16) Purchase of equipment.													
(a) Vouchers certified							6*				6		
(b) Warrants issued	6*						6						
(17) Contribution to Trust Fund	5*										5		

(18) Transfer of cash to Sinking Fund	2*										2		
(19) Collection from Special Fund	7			7*									
Balances at a date during the period	46	7	3*	3	5	28	3*	10*	6	6*	69*	2*	2*
(20) Licenses, fees, etc, collected	29					29*							
(21) Additional vouchers certified													
For previous encumbrances													
(a) Estimated encumbrances—reversed									4*	4			
(b) Vouchers certified							4*				4		
(c) For miscellaneous expenses							56*				56		
(22) Warrants issued	55*						55						
(23) Payment to Special Assessment Fund for public benefit	5*										5		
(24) Cash transferred to Stores Fund to cover shrinkage therein	1*										1		
Final Balances—before Closing	14	7	3*	3	5	1*	8*	10*	2	2*	3*	2*	2*
Closing Entries:													
Adjust Reserve for Uncollectible Taxes			1			1*							
Close Estimated Revenues						2							2*
Close Surplus Receipts												2	2*
Close unencumbered balance of Appropriations											1		1*
Balances after Closing—Carried to Next Fiscal Year	14	7	2*	3	5	—	8*	10*	2	2*	2*	—	7*

* Credit

the Vouchers Payable accounts is obvious; they should be supported by subsidiary registers.

The credit balance in the Surplus Receipts account represents the increase in surplus arising from sources other than revenues.

The Unappropriated Surplus account balance shows the (estimated during the period, actual at the end of the period) difference between revenues and appropriations.

Closing the accounts.—Entries closing certain accounts of the General Fund are shown in the summary on page 529

The Reserve for Uncollectible Taxes is found to be excessive; as the estimated revenues were therefore understated, the reserve is adjusted by debiting Reserve for Uncollectible Taxes and crediting Estimated Revenues.

After this adjustment has been made, the Estimated Revenues account has a credit balance of \$2,000.000, which shows that the actual revenues were greater than the estimated revenues, therefore, the estimated surplus was understated during the period. Debit Estimated Revenues, to close, credit Unappropriated Surplus.

The credit balance in Surplus Receipts represents an addition to Surplus, the account is therefore closed by transfer to Unappropriated Surplus.

Appropriations not expended or encumbered at the end of the period usually lapse; therefore the unencumbered balance of appropriations (\$3,000.00 credit balance in Appropriations, minus \$2,000.00 debit balance in Appropriation Encumbrances) is closed to Unappropriated Surplus.

The summary on page 529 shows the balances in the General Fund accounts after the foregoing closing entries have been made. These balances are carried forward to the accounts for the succeeding period.

Special Fund

Transactions.—The precise nature of this fund is of no significance; it should be regarded as applicable to some particular operating activity, such as a park or a library. Reference numbers appearing below in other than numerical sequence refer to transactions already mentioned in connection with the General Fund. The summary of the general ledger

accounts for the Special Fund appears on page 532.

(25) The total estimated revenue for the Special Fund for the fiscal year, as shown by the budget on page 521, was $30,000.00. Debit Estimated Revenues; credit Unappropriated Surplus.

(26) The total appropriations shown by the budget were $29,000.00. Debit Unappropriated Surplus; credit Appropriations.

(27) The tax levy for Special Fund purposes is $25,000.00; it is estimated that $1,000.00 of this amount will not be collectible. Debit Taxes Receivable, $25,000 00, credit Reserve for Uncollectible Taxes, $1,000.00, and Estimated Revenues, $24,000.00.

(8) A loan of $10,000.00 is received from the General Fund. Debit Cash; credit General Fund. (Contra entry in General Fund accounts.)

(28) Tax collections amount to $22,000.00. Debit Cash; credit Taxes Receivable.

(29) Materials that cost $2,000 00 are requisitioned from the Stores Fund Debit Appropriations; credit Stores Fund. (Contra entry will be made in Stores Fund accounts)

(30) Cash is transferred to the Stores Fund in payment for the materials. Debit Stores Fund; credit Cash. (Contra entry will be made in Stores Fund accounts.)

(31) Contracts are made and orders are placed in an estimated amount of $12,000 00 Debit Appropriation Encumbrances, credit Reserve for Encumbrances.

(32) Vouchers are certified for liabilities applicable to prior encumbrances.

(a) Estimated amount of encumbrances, $10,000 00; debit Reserve for Encumbrances and credit Appropriation Encumbrances.

(b) Vouchers certified, $9,000.00; debit Appropriations and credit Vouchers Payable.

(33) Warrants are issued in the amount of $7,000.00 in payment of vouchers. Debit Vouchers Payable; credit Cash.

(19) A transfer of $7,000.00 is made to the General Fund in partial repayment of the loan. Debit General Fund; credit Cash. (Contra entry in General Fund accounts.)

The balances in the accounts at this point are shown in the

Special Fund

Summary of General Ledger Accounts

(000 Omitted)

	Cash	Taxes Receivable	Reserve for Uncollectable Taxes	Estimated Revenues	Vouchers Payable	General Fund	Stores Fund	Appropriation Encumbrances	Reserve for Encumbrances	Appropriations	Unappropriated Surplus
(25) Total estimated revenue—per budget				30							30*
(26) Total appropriations—per budget										29*	29
(27) Tax levy		25	1*	24*							
(8) Loan from General Fund	10					10*					
(28) Taxes collected	22	22*									
(29) Materials requisitioned from Stores Fund							2*			2	
(30) Cash transferred to Stores Fund in payment for materials	2*						2				
(31) Contracts made and orders placed								12	12*		
(32) Liabilities on vouchers certified											
(a) Estimated encumbrances—reversed								10*	10		
(b) Vouchers certified					9*					9	
(33) Warrants issued	7*				7						
(19) Partial repayment of loan from General Fund	7*					7					
Balances at a date during the period	16	3	1*	6	2*	3*	—	2	2*	18*	1*
(34) Licenses, fees, etc., collected	5			5*							
(35) Additional vouchers certified For previous encumbrances											
(a) Reverse encumbrances								1*	1		
(b) Vouchers certified					1*					1	
(c) For miscellaneous expenses					15*					15	
(36) Warrants issued	14*				14						
Final Balances—before Closing	7	3	1*	1	4*	3*	—	1	1*	2*	1*
Closing Entries											
Close Estimated Revenues				1*							1
Close unencumbered balance of Appropriations										1	1*
Balances after Closing—Carried to Next Fiscal Year	7	3	1*	—	4*	3*	—	1	1*	1*	1*

* Credit

above summary, and are used in the illustration of a balance sheet prepared during the fiscal period.

(34) Licenses, fees, and so forth, are collected in the amount of $5,000.00. Debit Cash; credit Estimated Revenues.

(35) Additional vouchers certified, as follows:

For previous encumbrances:

(a) Estimated encumbrances, $1,000.00; debit Reserve for Encumbrances and credit Appropriation Encumbrances.

(b) Vouchers certified, $1,000.00; debit Appropriations and credit Vouchers Payable.

(c) For miscellaneous expenses not represented by previous encumbrances: amount of vouchers certified, $15,000.00, debit Appropriations and credit Vouchers Payable.

(36) Warrants are issued in payment of vouchers in the amount of $14,000.00. Debit Vouchers Payable; credit Cash.

Closing entries.—The balances before closing are shown in the summary, the following closing entries are made at the end of the fiscal period:

The Estimated Revenues account has a debit balance of $1,000.00, representing the excess of estimated over actual revenues; this debit balance is closed to Unappropriated Surplus.

There is a $2,000.00 credit balance in the Appropriations account, and a $1,000.00 debit balance in the Appropriation Encumbrances account; hence the unencumbered balance of appropriations is $1,000.00; as the appropriation now lapses, debit Appropriations and credit Unappropriated Surplus.

The summary shows the account balances after these closing entries have been made, these balances are carried forward to the Special Fund accounts for the succeeding period.

Stores Fund

Transactions.—A fund is established to centralize the purchasing of supplies, which are issued to the other funds upon requisitions. Theoretically, the stores should be issued at cost, including a pro-rated share of the expense of operation; actually, a surplus or deficit may develop, which should be taken up by the general fund. The receipts and expenditures of the fund cannot be easily estimated, therefore no budget will be prepared, and the accounts of the fund will not be opened by a debit to Estimated Revenues and a credit to Appropriations.

(9) Cash is transferred to this fund from the General Fund, to provide working capital for Stores Fund operations. Debit Cash, credit General Fund. (Contra entry in General Fund accounts.)

(37) Orders are issued for the purchase of stores. Debit Store Encumbrances; credit Reserve for Encumbrances.

(38) Stores are received, and vouchers therefor are certified:

- (a) The estimated amount of the encumbrances applicable to these invoices was $4,000.00; reverse the memorandum entries by debiting Reserve for Encumbrances and crediting Store Encumbrances.
- (b) The actual amount of the invoices was also $4,000.00; debit Stores and credit Vouchers Payable.

(10) Stores are issued to the General Fund on requisition. Debit General Fund, credit Stores. (Contra entry in General Fund accounts.)

(29) Stores are issued to the Special Fund on requisition. Debit Special Fund; credit Stores. (Contra entry in Special Fund accounts.)

(11) Cash is received from the General Fund in payment for the materials. Debit Cash; credit General Fund. (Contra entry in General Fund accounts.)

(30) Cash is received from the Special Fund in payment for the materials Debit Cash, credit Special Fund. (Contra entry in the Special Fund accounts.)

The balances in the accounts at this point are shown in the summary on page 535 ; they are used to illustrate a balance sheet prepared during the fiscal period.

(39) Vouchers are certified for freight, handling, and other expenses. Since all expenses of operating this fund may be considered costs of the stores issued to the other funds, debit Stores and credit Vouchers Payable.

(40) Additional stores are purchased and received. Debit Stores; credit Vouchers Payable.

(41) A physical inventory shows that the cost of the stores on hand is $1,000.00 less than the balance of the Stores

account. Debit Surplus; credit Stores.

(24) The working capital of the Stores Fund was impaired by the inventory shortage, and cash is received from the General Fund to replenish it. Debit Cash; credit Surplus. (Accompanying entry in General Fund accounts.)

The balances in the Stores Fund accounts, after these transactions have been recorded, are shown in the following summary. There are no closing entries; all balances are carried forward to the next fiscal period.

Stores Fund
Summary of General Ledger Accounts
(000 Omitted)

	Cash	Special Fund	Stores	Stores Encumbrances	Vouchers Payable	Reserve for Encumbrances	General Fund	Surplus
(9) Cash received from General Fund for working capital	5						5*	
(37) Orders issued for stores				6		6*		
(38) Liability for vouchers certified.								
(a) Estimated encumbrances—reversed				4*		4		
(b) Vouchers certified			4		4*			
(10) Stores issued to General Fund			1*				1	
(29) Stores issued to Special Fund		2	2*					
(11) Cash received from General Fund in payment for stores	1						1*	
(30) Cash received from Special Fund in payment for stores	2	2*						
Balances at a date during the period	8		1	2	4*	2*	5*	
(39) Freight, handling, and other expenses			1		1*			
(40) Purchases			7		7*			
(41) Adjustment of Stores account to physical inventory			1*					1
(24) Cash from General Fund to cover shortage of Stores	1							1*
Final Balances—Carried to next fiscal year	9		8	2	12*	2*	5*	

* Credit.

Bond Fund

Transactions.—The accounts of bond funds are intended to show the disposition of the proceeds of bonds issued for capital purposes, such as the construction of a bridge or a building. The bonds are not shown as liabilities of the fund, because they are not to be paid from the proceeds of the bonds; the property constructed is not shown as an asset of the fund, because it is not available for further expenditure. The fixed assets acquired and the bond liability are shown in the accounts in the Property section of the general ledger.

If bonds are issued for special, non-capital purposes, such as the payment of a soldier's bonus, Bond Fund accounts should be opened, to show the proceeds of the issue and the disposition thereof.

(42) Bonds of a par value of $100,000.00 are authorized. Debit Bonds Authorized and Unissued; credit Unappropriated Balance. (See accompanying entry in Property accounts.)

(43) Bonds of a par value of $75,000.00 are sold for $78,000 00. If bonds are issued for the construction of assets to be used in some revenue-producing activity such as a municipally operated utility, the premium should be set up and amortized, so that true interest costs can be charged against the subsequent operations. In other cases the premium may be regarded merely as an addition to the amount available for expenditure, and the effect upon interest costs may be ignored; it is so treated in the illustration. Debit Cash, $78,000 00; credit Bonds Authorized and Unissued, $75,000.00, and Unappropriated Balance, $3,000.00.

(44) A total of $99,000.00 is appropriated for expenditure for the purpose for which the bonds were issued. Debit Unappropriated Balance; credit Appropriations

(45) A construction contract is signed; the estimated cost is $90,000 00. Debit Appropriation Encumbrances, credit Reserve for Encumbrances.

(46) As the work progresses, progress payments are made:

(a) For the estimated portion of the contract completed: Debit Reserve for Encumbrances; credit Appropriation Encumbrances.

(b) For vouchers certified Debit Appropriations; credit Vouchers Payable.

(47) Warrants are issued in payment of vouchers. Debit Vouchers Payable; credit Cash.

The balances in the accounts at this point are shown in the summary on page 537; they are used in the illustrative interim balance sheet.

(48) The remaining bonds, of a par value of $25,000.00, are sold for $24,000.00. Debit Cash, $24,000.00, and Unappropriated Balance, $1,000.00, credit Bonds Authorized and Unissued, $25,000.00.

(49) The construction contract is completed:

(a) Close the memorandum accounts with encumbrances; debit Reserve for Encumbrances and credit Appropriation Encumbrances

(b) Record the certification of vouchers; debit Appropriations and credit Vouchers Payable.

(50) Vouchers are certified for other expenses totaling \$10,000.00. Debit Appropriations, credit Vouchers Payable.

(51) Warrants are issued in payment of all certified vouchers. Debit Vouchers Payable; credit Cash.

The balances in the general ledger accounts of this fund, after the completion of the contract, are shown in the summary below.

Bond Fund
Summary of General Ledger Accounts
(000 Omitted)

	Cash	Bonds Authorized and Unissued	Vouchers Payable	Appropriation Encumbrances	Reserve for Encumbrances	Appropriations	Unappropriated Balance
(42) Bonds authorized		100					100*
(43) Bonds sold at a premium	78	75*					3*
(44) Appropriation for purpose of fund						99*	99
(45) Contract signed				90	90*		
(46) Vouchers certified for progress payments							
(a) Estimated encumbrance—reversed				45*	45		
(b) Vouchers certified			45*			45	
(47) Warrants issued	40*		40				
Balances before completion	38	25	5*	45	45*	54*	4*
(48) Remaining bonds sold at a discount	24	25*					1
(49) Contract completed							
(a) Encumbrances reversed				45*	45		
(b) Vouchers certified			45*			45	
(50) Vouchers certified for other expenses			10*			10	
(51) Warrants issued in full payment of vouchers	60*		60				
Balances after completion	2					1	3*
Closing entries							
Close Appropriations						1*	1
(52) Transfer remaining cash to Sinking Fund	2*						2
Balances							

* Credit

General ledger and subsidiary accounts.—The Appropriations, Appropriation Encumbrances, and Reserve for Encumbrances accounts are similar to those discussed under the

General Fund, and are supported by similar subsidiary records. The nature of the Bonds Authorized and Unissued account is obvious. The Unappropriated Balance account is credited with the par of the bonds authorized, and debited and credited with items which decrease or increase the amount available for expenditure; it is debited with the appropriations; its balance therefore represents the unappropriated resources of the fund.

Closing the accounts.—As shown by the summary on page 537, the Appropriations account has a debit balance of $1,000.00, indicating that the expenditures were in excess of the appropriation; this balance is transferred to the debit of Unappropriated Balance.

(52) The Cash account now has a debit balance of $2,000.00, and the Unappropriated Balance account has a credit balance of the same amount. The unexpended cash is transferred to the sinking fund for the payment of the bonds, and the accounts of the Bond Fund are closed by debiting Unappropriated Balance and crediting Cash. (Contra entry in Sinking Fund accounts.)

Sinking Fund

Transactions.—The accounts of this group show the provision for, and payment of, the interest and principal of bonds and other funded debt. The illustration relates to the $100,000.00 of bonds dealt with in the preceding discussion of the Bond Fund.

(53) At the beginning of the period, or at the time of the issuance of the bonds, entries should be made showing the amount which must be provided in the sinking fund during the year, to meet principal and interest requirements. In the illustration, it is assumed that $10,000.00 must be provided for principal and $6,000.00 for interest. Debit Sinking Fund Requirements, $16,000 00; credit Reserve for Retirement of Bonds, $10,000.00, and Reserve for Bond Interest, $6,000.00.

(18) A portion of the requirements is met by a transfer of $2,000.00 from the General Fund. Debit Cash; credit Sinking Fund Requirements. (Contra entry in General Fund accounts.)

(54) The special tax levy for sinking fund purposes is recorded by debiting Taxes Receivable, $14,000.00, and crediting Reserve for Uncollectible Taxes, $1,000.00, and Sinking Fund Requirements, $13,000 00.

(55) Taxes are collected in the amount of $10,000 00. Debit Cash, credit Taxes Receivable.

(56) Securities are purchased. Debit Investments, credit Cash. If securities are purchased with the intention of holding them until the maturity of the bond liability, any premium or discount may be set up and amortized.

(57) Interest in the amount of $1,000.00 is collected on sinking fund investments Debit Cash; credit Income.

(58) Securities are sold. Debit Cash, credit Investments. Any profit or loss on sales of securities may be taken up in the Income account

(59) Bond interest for a half year is paid.

(a) Debit Reserve for Bond Interest; credit Appropriations.
(b) Debit Appropriations; credit Cash.

The balances in the accounts at this point are shown in the summary, and appear in the illustrative interim balance sheet.

(52) The unexpended cash in the Bond Fund was transferred to the Sinking Fund. Debit Cash; credit Sinking Fund Requirements. (Accompanying entry in Bond Fund accounts)

(60) Bonds of a par value of $5,000.00 are retired·

(a) Debit Reserve for Retirement of Bonds; credit Appropriations.
(b) Debit Appropriations; credit Cash.

(Since the bond liability is shown in the Property group of accounts, an entry for the retirement of the bonds is also required in that group of accounts.)

The balances in the accounts at the end of the fiscal year, before closing entries are made, are shown in the summary on page 540.

General ledger and subsidiary accounts.—A debit balance at any time in the Sinking Fund Requirements account shows

Sinking Fund
Summary of General Ledger Accounts
(000 Omitted)

	Cash	Taxes Receivable	Reserve for Uncollectible Taxes	Investments	Sinking Fund Requirements	Reserve for Retirement of Bonds	Reserve for Bond Interest	Appropriations	Income	Surplus
(53) Requirements for the fiscal year					16	10*	6*			
(18) Received cash from General Fund	2				2*					
(54) Tax levy for the year		14	1*		13*					
(55) Taxes collected	10	10*								
(56) Securities purchased	11*			11						
(57) Income on securities	1								1*	
(58) Securities sold	8			8*						
(59) Bond interest paid										
(a) Appropriation							3	3*		
(b) Payment	3*							3		
Balances at a date during the period	7	4	1*	3	1	10*	3*		1*	
(52) Cash transferred from Bond Fund	2				2*					
(60) Bonds paid										
(a) Appropriation						5		5*		
(b) Warrants issued	5*							5		
Balances at end of fiscal year before closing	4	4	1*	3	1*	5*	3*		1*	
Closing Entries										
Close Income to Sinking Fund Requirements					1*				1	
Close Sinking Fund Requirements to Surplus					2					2*
Balances after closing—Carried forward to next fiscal year	4	4	1*	3		5*	3*			2*

* Credit

that resources equal to the requirements for the period have not yet been received, a credit balance indicates that the assets received have exceeded the requirements.

The nature of the Cash, Taxes Receivable, Reserve for Uncollectible Taxes, Investments, and Income accounts is obvious. The two Reserve accounts show the prospective disposition of sinking fund assets during the period; when actual dispositions are made, this account is debited and Appropriations is credited.

If there are several sinking funds, applicable to different bond issues, all of the general ledger accounts should be supported by subsidiary records showing the facts with respect to each fund. If the investments of several funds are pooled, the subsidiary Investment record will show the investments in detail, but without allocation by funds.

Closing entries.—The Income account (see summary on page 540) has a credit balance of $1,000.00, this balance is transferred to the credit of Sinking Fund Requirements, because the income collected helped to meet the sinking fund requirements. After this entry is made, the Sinking Fund Requirements account has a credit balance of $2,000.00, which represents the excess of resources obtained by the fund over its requirements for the period—in other words, the surplus of the fund Therefore the balance in the Sinking Fund Requirements account is closed to the credit of Surplus.

Special Assessment Fund

Transactions.—Special assessment funds, frequently found in the accounts of municipalities, arise generally from the sale of local improvements bonds. The proceeds are expended for the improvement; the cost thereof is charged back to the property owners, or in part to the city as a public benefit; and the bonds and interest are paid from the collections from the property owners and the city. Since the bonds are paid from collections received by the fund, they are shown as a liability of the fund.

(61) A $50,000.00 expenditure for a local improvement is approved. Debit Available Authorization; credit Unencumbered Balance.

(62) Bonds of a par value of $50,000.00 are authorized. Debit Bonds Authorized and Unissued; credit Bonds Payable.

(63) Bonds of a par value of $40,000 00 are sold for $41,000.00; the premium realized increases the available balance of the fund. Debit Cash, $41,000.00; credit Bonds Authorized and Unissued, $40,000.00 and Unencumbered Balance, $1,000.00.

(64) A contract for the improvement is signed; the estimated cost is $45,000.00. Debit Unencumbered Balance, credit Reserve for Encumbrances.

(65) Vouchers for miscellaneous costs and expenses, totaling $5,000.00, are certified. Debit Unencumbered Balance; credit Vouchers Payable.

(66) Warrants for $3,000.00 are issued against vouchers certified:

(a) Debit Vouchers Payable; credit Cash.

(b) Since the expenditures from this fund are

recoverable by charges to the property owners and the city, debit Reimbursable Expenditures and credit Available Authorization.

The balances in the accounts at this point are shown in the summary on page 543, and appear in the illustrative interim balance sheet.

(67) The remaining bonds are sold at par. Debit Cash; credit Bonds Authorized and Unissued.

(68) Vouchers are certified for the completed contract, at a cost of $45,000.00. Debit Reserve for Encumbrances; credit Vouchers Payable.

(69) Warrants are issued for all certified vouchers.

(a) Record the payment by debiting Vouchers Payable and crediting Cash, $47,000 00.

(b) Record the amount reimbursable by debiting Reimbursable Expenditures and crediting Available Authorization, $47,000.00.

(c) The contract is now completed and all expenditures have been made. The Unencumbered Balance account has a credit balance of $1,000.00, representing the surplus of the fund, and this balance is transferred to Surplus. Any losses on, or abatements of, assessments may subsequently be charged against this surplus balance.

(70) The expenditures from the fund totaled $50,000.00; of this amount, $40,000.00 is assessed against property owners, and $10,000.00 is regarded as a public benefit. Debit Assessments Receivable, $40,000.00, and Public Benefit, $10,000.00; credit Reimbursable Expenditures, $50,000.00. This entry closes the last-named account.

(23) A collection of $5,000.00 is received from the General Fund to apply against the amount assessed as a public benefit. Debit Cash, credit Public Benefit. (The accompanying General Fund entry is: Debit Appropriations, credit Cash. An entry will also be made in the Property account section of the ledger, debiting Property and crediting Surplus Invested in Fixed Assets, $5,000.00.)

(71) An assessment installment of $15,000.00, with

Assessment Fund

Summary of General Ledger Accounts

(000 Omitted)

	Cash	Bonds Authorized and Unissued	Reimbursable Expenditures	Available Authorization	Assessments Receivable	Public Benefit	Interest	Vouchers Payable	Bonds Payable	Reserve for Encumbrances	Unencumbered Balance	Surplus
(61) Expenditure approved				50							50*	
(62) Bonds authorized		50							50*			
(63) Bonds sold at a premium	41	40*									1*	
(64) Contract signed										45*	45	
(65) Vouchers certified for expenses								5*			5	
(66) Warrants issued:												
(a) Entry for payment	3*							3				
(b) Reimbursable expenditure.			3	3*								
Balances at a date during the period	38	10	3	47	—	—	—	2*	50*	45*	1*	—
(67) Remaining bonds sold at par	10	10*										
(68) Vouchers certified for completed contract								45*		45		
(69) Warrants issued in final payment												
(a) Entry for payment	47*							47				
(b) Reimbursable expenditures			47	47*								
(c) Close Unencumbered Balance to Surplus											1	1*
(70) Assessment			50*		40	10						
(23) Collection from General Fund	5					5*						
(71) Assessments and interest collected	16				15*		1*					
(72) Bond interest paid	3*						3					
(73) Bonds paid	5*								5			
Balances at end of period	14	—	—	—	25	5	2	—	45*	—	—	1*

* Credit

$1,000.00 interest thereon, is collected. Debit Cash, $16,-000.00, credit Assessments Receivable, $15,000.00, and Interest, $1,000.00.

(72) Bond interest totaling $3,000.00 is paid. Debit Interest; credit Cash.

(73) Bonds of a par value of $5,000.00 are paid. Debit Bonds Payable; credit Cash.

The account balances carried over to the next fiscal period are shown in the summary on page 543.

General ledger and subsidiary accounts.—It is believed that the nature of all general ledger accounts illustrated is obvious. It should be understood that separate subsidiary accounts should be maintained with each special assessment fund, so that there may be no danger of confusion and misapplication of funds.

If, after a particular fund has been closed by the final payment of the bonds, a balance remains in the Surplus account, theoretical propriety would require a distribution of the residue of the fund to the property owners and to the General Fund in proportion to the assessment and public benefit charges paid by them. As such a distribution is usually impracticable, the excess is generally transferred to other assessment funds or to the General Fund.

Trust Fund

Transactions.—Endowment funds, pension funds, and other trust funds may be received by gift or by appropriation of public funds. Usually only the income is expendable.

(74) A gift of $45,000.00 is received in cash for the creation of a special-purpose trust fund. The gift is conditional upon the appropriation of an additional $5,000.00 from the public treasury, and only the income from the fund is to be expended. For the $45,000.00 gift: debit Cash; credit Permanent Balance.

(17) Cash in the amount of $5,000 00 is transferred from the General Fund. Debit Cash; credit Permanent Balance. (Contra entry in General Fund accounts.)

(75) Securities are purchased for the fund:

(a) For vouchers certified: Debit Investments;

credit Vouchers Payable.

(b) For warrants issued. Debit Vouchers Payable; credit Cash.

If securities are purchased at a premium for a fund of which only the income is expendable, the premium should be amortized against income.

(76) Income is collected. Debit Cash; credit Expendable Balance.

(77) Expenditures are made for the purpose for which the fund was created:

(a) For vouchers certified: Debit Expendable Balance; credit Vouchers Payable.

(b) For warrants issued: Debit Vouchers Payable, credit Cash.

The summary of the general ledger accounts is shown below.

Trust Fund
Summary of General Ledger Accounts
(000 Omitted)

	Cash	Investments	Vouchers Payable	Permanent Balance	Expendable Balance
(74) Gift received	45			45*	
(17) Contribution from General Fund	5			5*	
(75) Purchase of securities:					
(a) Vouchers certified		45	45*		
(b) Warrants issued	45*		45		
(76) Income collected	3				3*
(77) Expenditures					
(a) Vouchers certified			2*		2
(b) Warrants issued	2*		2		
Balances at a date during (and also at the end of) the period	6	45		50*	1*

* Credit

General ledger and subsidiary accounts.—The nature of all general ledger accounts in the Trust Fund group is obvious. If there are several trust funds, one group of general ledger accounts will be sufficient, but all of these general ledger accounts should be supported by similar subsidiary accounts for each fund.

Property Accounts

Transactions.—The Property, Fixed Assets, or Plant Capital group of accounts shows the cost of fixed assets owned and not appertaining to any fund, the capital liabilities which are not obligations of particular funds, and the excess of such assets over such liabilities, or the surplus invested in fixed assets.

Fixed assets are customarily carried at cost, and are not subjected to depreciation charges, because. (a) No profit and loss statement is prepared (except for utilities, such as water or light plants operated by a city; fixed assets applicable to such plants should be depreciated). (b) There would be no justification for the charge unless it were desired to create a replacement fund by including a provision therefor in the budget, but this would be undesirable because fixed assets are usually purchased from the proceeds of bond issues, and are paid for by assessments subsequent to acquisition. The inclusion of both the sinking fund requirements and a depreciation fund requirement in the same budget would involve a double charge upon the same taxpayers.

(1) The summary on page 547 shows the condition at the beginning of the period, reflected by the debit balance in the Property account and the credit balance in Surplus Invested in Fixed Assets.

(15) Certain property which cost $10,000.00 was disposed of. Debit Surplus Invested in Fixed Assets; credit Property. (The proceeds of the sale, $2,000.00, were taken up in the General Fund. The $8,000.00 loss is nowhere recorded.)

(16) Equipment was purchased with General Fund Cash. Debit Property; credit Surplus Invested in Fixed Assets. (Contra entry in General Fund accounts.)

(42) Bonds of a par value of $100,000.00 were authorized for a public improvement. Debit Improvements in Progress; credit Bonds Payable. (Contra entry in Bond Fund accounts.)

The balances shown in the accounts at this point are assumed to reflect the condition at the date of the illustrative interim balance sheet.

(23) A payment of $5,000.00, representing the portion of the cost of the local improvement that is regarded as a public

benefit, was made from the General Fund to the Assessment Fund. Debit Property; credit Surplus Invested in Fixed Assets. (Accompanying entries in the General Fund and Assessment Fund accounts)

(78) The public improvement for which bonds were issued (transaction 42) has been completed. Its cost, as shown by the accounts of the Bond Fund, was $100,000.00. Debit Property; credit Improvements in Progress. Any difference between the cost of the completed improvement and the par of the bonds issued therefor, would be recorded in Surplus.

(60) Bonds of a par value of $5,000.00 (authorized in transaction 42) have been retired by payments from the sinking fund. Debit Bonds Payable, credit Surplus Invested in Fixed Assets. (Accompanying entry in Sinking Fund accounts.)

The balances at the end of the period are shown in the following summary.

Property Accounts
Summary of General Ledger Accounts
(000 Omitted)

	Property	Improvements in Progress	Bonds Payable	Surplus Invested in Fixed Assets
(1) Opening balances	1,000			1,000*
(15) Cost of property disposed of	10*			10
(16) Cost of equipment purchased with General Fund cash	6			6*
(42) Bonds authorized for public improvement		100	100*	
Balances at a date during the period	996	100	100*	996*
(23) Payment by General Fund to Assessment Fund for portion of local improvement cost regarded as public benefit	5			5*
(78) Total cost of improvement paid from Bond Fund	100	100*		
(60) Bonds paid from Sinking Fund			5	5*
Balance at end of fiscal period	1,101		95*	1,006*

* Credit

General ledger and subsidiary accounts.—Complete subsidiary records should be maintained showing the cost of each separate unit of property, and the amount of liability on each bond issue.

Statements

So many different statements may be prepared to reflect the operation and condition of the various funds, that it is impracticable to attempt to do more than mention and illustrate some of the more important statements.

Statement of realization of revenues.—From time to time during, as well as at the end of, the period, it is desirable to prepare a statement showing the relation of revenue accruals to revenue estimates, and of revenue collections to revenue accruals. Such a statement may be prepared in the following form:

Statement of Realization of Revenues

From . ... To ... .

	Estimate Per Budget	Accrued			Not Accrued	Collected	Not Collected
		Total	Reserve	Net			
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
General Fund Taxes Licenses Etc Total Special Fund: Taxes Licenses Etc	Amounts shown by debits in subsidiary revenue ledger accounts	Taxes, from debit to Taxes Receivable in general ledger, other amounts from credits to accounts in subsidiary revenue ledger	Amount shown by credit to Reserve account in general ledger	(b) — (c)	(a) — (d)	Shown by cash records	(d) — (f)

Statement of appropriations.—Departmental executive officers should be kept informed of the status of appropriations for their departments. This can be most easily accomplished by providing them at intervals with copies of the departmental subsidiary appropriation accounts (General Administration, Police Department, and so forth, see page 527). A summary may be prepared as follows:

Summary of Appropriations

From .... To ....

	Appropriations (a)	Expenditures (b)	Unexpended Balance (c)	Encumbrances (d)	Unencumbered Balance (e)
General Fund					
General Administration					
Police Department					
Etc					
Total					
Special Fund					
General Administration					
Etc					
Total					
	Amounts shown by credits in subsidiary appropriation ledger (See page 527.)	Amounts shown by debits in subsidiary appropriation ledger (See page 527.)	(a) − (b)	Amounts shown by debits in Encumbrances column of subsidiary appropriation ledger accounts (See page 527.)	(c) − (d)

Balance sheets.—A balance sheet may be prepared for each fund and for the property accounts. The illustration on pages 550 and 551 shows a consolidated balance sheet prepared at a date during the period. The illustration on page 552 shows the account balances at the end of the period. Either form illustrated could be used for either an interim or a final balance sheet.

It should be noted that the amount shown as Appropriations in each section of the balance sheet is the difference between the credit balance in the Appropriations account and the debit balance in the Appropriation Encumbrances account.

The illustrations do not show the treatment of a funded deficit in a revenue fund. If it becomes necessary to issue bonds because of an accumulated deficit, the entries are: (1) debit Cash, credit Revenue Bonds; and (2) debit Funded

Consolidated Fund Balance Sheet

(At a Date During the Fiscal Year)

Assets

General Fund:			
Cash		$ 46,000	
Taxes Receivable	$7,000		
Less Reserve for Loss	3,000	4,000	
Due from Other Funds:			
Special Fund.	$3,000		
Stores Fund	5,000	8,000	
Estimated Revenues		28,000	
Total			$ 86,000
Special Fund:			
Cash		$ 16,000	
Taxes Receivable	$3,000		
Less Reserve for Loss	1,000	2,000	
Estimated Revenues		6,000	
Total			24,000
Stores Fund			
Cash		$ 8,000	
Stores			
Inventory	$1,000		
Orders	2,000	3,000	
Total			11,000
Bond Fund			
Cash		$ 38,000	
Bonds Authorized and Unissued		25,000	
Total			63,000

Liabilities and Surplus

General Fund			
Vouchers Payable		$ 3,000	
Tax Anticipation Warrants Payable		10,000	
Reserve for Encumbrances		6,000	
Appropriations		63,000	
Surplus			
Unappropriated Surplus	$2,000		
Surplus Receipts	2,000	4,000	
Total			$ 86,000
Special Fund			
Vouchers Payable		$ 2,000	
Due to General Fund		3,000	
Reserve for Encumbrances		2,000	
Appropriations		16,000	
Unappropriated Surplus		1,000	
Total			24,000
Stores Fund.			
Vouchers Payable		$ 4,000	
Reserve for Encumbrances		2,000	
Due to General Fund		5,000	
Total			11,000
Bond Fund			
Vouchers Payable		$ 5,000	
Reserve for Encumbrances		45,000	
Appropriations		9,000	
Unappropriated Balance		4,000	
Total			63,000

Sinking Fund			
Cash		$ 7,000	
Taxes Receivable	$4,000		
Less Reserve for Loss	1,000	3,000	
Investments		3,000	
Requirements		1,000	
Total			14,000
Assessment Fund			
Cash		$ 38,000	
Bonds Authorized and Unissued		10,000	
Reimbursable Expenditures		3,000	
Available Authorization		47,000	
Total			98,000
Trust Fund			
Cash		$ 6,000	
Investments		45,000	
Total		..	51,000
Property			
Property		$996,000	
Improvements in Progress		100,000	
Total			1,096,000
Grand Total			$1,443,000

Sinking Fund		
Reserve for Retirement of Bonds	$ 10,000	
Reserve for Bond Interest	3,000	
Income	1,000	
Total		14,000
Assessment Fund		
Vouchers Payable	$ 2,000	
Bonds Payable	50,000	
Reserve for Encumbrances	45,000	
Unencumbered Balance	1,000	
Total		98,000
Trust Fund		
Vouchers Payable	$——	
Trust Fund Balances		
Permanent	50,000	
Expendable	1,000	
Total		51,000
Property		
Bonds Payable	$100,000	
Surplus Invested in Fixed Assets	996,000	
Total		1,096,000
Grand Total	..	$1,443,000

Consolidated Fund Balance Sheet

(At the End of the Fiscal Year—After Closing)

	General Fund	Special Fund	Stores Fund	Bond Fund	Sinking Fund	Assessment Fund	Trust Fund	Property	Total
Assets									
Cash	$14,000	$7,000	$ 9 000	(Closed at the end of the year)	$ 4,000	$14,000	$ 6,000		$ 54,000
Taxes Receivable—Less Reserve	5,000	2,000			3,000				10,000
Assessments Receivable						25,000			25,000
Due from Other Funds	8,000								8,000
Stores on Hand and Ordered			10,000						10,000
Investments					3,000		45,000		48 000
Public Benefit						5,000			5,000
Interest						2,000			2,000
Property								$1,101,000	1,101,000
	$27,000	$9,000	$19,000		$10,000	$46,000	$51,000	$1,101,000	$1,263,000
Liabilities and Surplus									
Vouchers Payable	$ 8,000	$4,000	$12,000						$ 24,000
Tax Anticipation Warrants Payable	10,000								10,000
Reserve for Encumbrances	2,000	1,000	2,000						5,000
Due to Other Funds		3,000	5,000						8,000
Reserve for Retirement of Bonds					$ 5,000				5,000
Reserve for Bond Interest					3,000				3,000
Bonds Payable						$45,000		$ 95,000	140,000
Surplus:									
Unappropriated	7,000	1,000			2,000	1,000			11,000
Permanent Trust Fund Balance							$50,000		50,000
Expendable Trust Fund Balance							1,000		1,000
Surplus Invested in Fixed Assets								1,006,000	1,006,000
	$27,000	$9,000	$19,000		$10,000	$46,000	$51,000	$1,101,000	$1,263,000

Deficit, credit Surplus. The bonds should be shown as a liability of the revenue fund, since they are payable from revenues to be raised by the fund. The condition should be shown in the balance sheet somewhat as follows:

Cash	$20,000		Vouchers Payable	$35,000	
Taxes Receivable	50,000		Appropriations	40,000	
Estimated Revenues	10,000		Unappropriated Surplus	5,000	
Subtotal	$80,000		Subtotal	$80,000	
Funded Deficit	15,000	$95,000	Revenue Bonds	15,000	$95,000

Revenues and receipts; expenditures and disbursements. Revenues may differ from cash receipts, because revenues may have accrued and been credited to revenue accounts, although they have not been collected. Expenditures may differ from disbursements, because an expenditure is made as soon as a liability is incurred.

For these reasons it is desirable to prepare, for each fund and for all of the funds combined, both a statement of revenues and expenditures and a statement of receipts and disbursements. In these statements, the revenues and cash receipts should be classified by sources (taxes, licenses, and so forth); the expenditures and disbursements should be classified by departments (general administration, police department, and so forth), and, for each department, by objects (salaries, supplies, and so forth).

The statement of receipts and disbursements is made from the cash records. Data for the statement of revenues and expenditures are obtained as follows: revenues—from the subsidiary ledger revenue accounts; expenditures—from the accounts in the subsidiary expenditure analysis ledger supporting the subsidiary appropriations ledger. (See page 527.)

The dual account system.—All of the foregoing discussion and illustrations are applicable to the simplified system of accounting which is recommended in preference to the somewhat older, and more involved, dual account system. Under the dual account system, two separate groups of accounts are kept with each fund; one group is known as the budget, or fund, accounts; and the other, the proprietary accounts.

The operation of the dual account system is shown by the summary of accounts on page 554. The additional

	Budget, or Fund, Accounts							Proprietary Accounts				
	Estimated Revenues	*Available Balance*	*Unapplied Cash*	Encumbrances	Reserve for Encumbrances	Appropriations	Unappropriated Estimated Surplus	Cash	Taxes Receivable	Vouchers Payable	*Expense*	*Revenue*
(1) Estimated revenues—per budget	50						50*	(No entries)				
(2) Appropriations—per budget						49*	49					
(3) Tax levy	40*	*40*							40			*40**
(4) Taxes collected		*25**	*25*					25	25*			
(5) Miscellaneous revenue collected	7*		*7*					7				*7**
(6) Orders placed				6	6*			(No entries)				
(7) Vouchers certified												
(a) Encumbrances reversed				4*	4			(No entries)				
(b) Vouchers recorded			*4**			4				4*	*4*	
(8) Warrants issued			(No entries)					3*		3		
Balances												
Of budget accounts	3	*15*	*28*	2	2*	45*	1*					
Of proprietary accounts								29	15	1*	*4*	*47**

accounts required, and the entries therein, are shown in italics.

When this system of accounting is used, two balance sheets are prepared, as illustrated below:

General Fund Balance Sheets

(Date)

Budget Accounts		
Unapplied Cash		$28,000 00
Available Balance		15,000 00
Estimated Revenues		3,000 00
		$46,000 00
Reserve for Encumbrances		$ 2,000 00
Appropriations		43,000 00
Unappropriated Estimated Surplus		1,000 00
		$46,000 00
Proprietary Accounts		
Cash		$29,000 00
Taxes Receivable		15,000 00
		$44,000 00
Vouchers Payable		$ 1,000 00
Surplus.		
Revenues.	$47,000 00	
Expenses	4,000 00	43,000 00
		$44,000 00

The single balance sheet that would be prepared under the simplified system, appears below.

General Fund Balance Sheet

(Date)

Cash	$29,000 00
Taxes Receivable	15,000 00
Estimated Revenues	3,000 00
	$47,000 00
Vouchers Payable	$ 1,000 00
Reserve for Encumbrances	2,000 00
Appropriations	43,000 00
Unappropriated Estimated Surplus	1,000 00
	$47,000 00

CHAPTER 59

BANK ACCOUNTING

General ledger accounts.—The following trial balance shows the account balances of the general ledger of a commercial bank. It should be understood that many of the accounts are controls, which are supported by subsidiary ledgers or other records.

THE *X* NATIONAL BANK

Trial Balance

Cash on Hand	$ 2,363,100	
Federal Reserve Bank—Reserve Account	78,021,000	
Federal Reserve Bank—Transit Account	4,833,000	
Due from Banks—Domestic	35,173,800	
Transit Account—Domestic	2,031,900	
Due from Banks—Foreign	552,500	
Transit Account—Foreign	35,100	
Exchange from Clearings	3,735,000	
Coupons and Bonds in Transit	35,700	
Cash Items	19,500	
Sundry Holdovers	8,600	
Bills of Exchange	397,200	
U S Government Securities	70,812,000	
Other Securities	12,597,600	
Stock in Federal Reserve Bank	600,000	
5% Redemption Fund for Note Circulation	100,000	
Call Loans	2,800,000	
Brokers' Loans	3,597,300	
Federal Reserve Funds Sold	150,000	
Bankers' Acceptances	450,500	
Commercial Paper	3,337,800	
Banks' and Bankers' Loans	2,840,000	
Commercial Loans	49,021,500	
Advances on Foreign Bills	145,000	
Other Loans and Advances	856,100	
Customers' Liability on Acceptances Executed	240,900	
Acceptances Executed		$ 240,900
Funds in Anticipation of Maturing Acceptances		27,300
Prepayments on Acceptances		30,000
Acceptances of this Bank	40,500	
Customers' Liability on Letters of Credit	418,200	
Letters of Credit Issued Under Guarantee		418,200
Payments Under Letters of Credit	12,000	
Letters of Credit and Travelers' Checks Sold for Cash		26,600

Overdrafts	13,200	
Accrued Interest Receivable	414,900	
Bank Building	1,300,000	
Furniture and Fixtures	358,400	
Other Resources	94,700	
Prepaid Expenses	157,800	
Capital Stock		20,000,000
Surplus		3,000,000
Undivided Profits		950,600
Contingent Reserve		159,300
Bond Reserve		182,100
Taxes Reserved and Unpaid		408,000
Unearned Discount		171,900
Note Circulation		2,000,000
Individual Deposits—Demand		134,803,600
Special Deposits		295,000
Garnishee Accounts		6,400
Trust Department Deposits		24,104,000
Bank Deposits—Domestic		38,200,000
Bank Deposits—Foreign		2,883,000
Cashier's Checks		3,579,000
Certified Checks		2,101,200
Expense Checks		29,900
Clearing House Return Checks		2,400
Public Funds		13,853,000
Savings Deposits		28,647,000
Certificates of Deposit		210,100
Interest and Discount		2,735,300
Exchange		29,000
Foreign Exchange		3,600
Trust Department Earnings		188,600
Rents Received		45,000
Other Earnings		242,100
Interest Paid or Accrued	700,600	
Expense	1,307,700	
	$279,573,100	$279,573,100

Nature of the accounts.—The nature and operation of the accounts shown in the foregoing trial balance are explained in the following comments:

Cash on Hand—$2,363,100.00.

Currency and coins on hand are the only items included as cash in the statements and the accounts of a bank Checks, money orders, and deposits in banks are segregated in the accounts and the statements. As cash on hand is a non-productive asset, a bank will ordinarily have on hand as little cash as possible; the amount will depend partly on the normal requirements and partly on the bank's accessibility to the Federal Reserve Bank.

Federal Reserve Bank—Reserve Account—$78,021,000 00.
Federal Reserve Bank—Transit Account— 4,833,000 00

All member banks are required to keep on deposit with the Federal Reserve Bank a certain percentage of their deposits, the percentages are determined by the nature of the customers' deposits and the bank's location, as follows:

Time deposits·
All member banks are required to maintain a 3% reserve
Demand deposits:
Banks in central reserve cities (Chicago and New York) are required to maintain a 13% reserve
Banks in the other sixty-four reserve cities are required to maintain a 10% reserve
All other member banks must maintain a 7% reserve.

Items deposited with, or cleared through, the Federal Reserve Bank are ordinarily recorded in the Transit account until the credits are reported by the Reserve Bank, when they are transferred from the Transit account to the Reserve account. The proceeds of paper rediscounted with the Reserve Bank are credited directly to the Reserve account.

Due from Banks—Domestic—$35,173,800 00
Transit Account—Domestic— 2,031,900.00.

Banks normally maintain deposits with the correspondent banks through which their out-of-town checks, drafts, and collection items are cleared; therefore, a daily settlement for items cleared is not necessary. Such items are charged to the Transit account until the credits are reported by the correspondent bank, when they are transferred to the Due from Banks account.

Due from Banks—Foreign—$552,500 00.
Transit Account—Foreign— 35,100 00.

These two accounts are operated in the same manner as the corresponding domestic accounts They are kept in both foreign and domestic currencies, and the exchange gains or losses are determined in the manner described in Chapter 52

Exchange from Clearings—$3,735,000 00.

The balance of this account represents checks and other cash items on other banks in the same city, that are in process of

collection through the local clearing house or direct from the banks

Coupons and Bonds in Transit—$35,700 00.

Coupons and matured bonds presented to the bank by customers for collection are charged to, and carried in, this account until collected; after the coupons and bonds are collected, this account is credited, and Due from Banks or some other asset account is debited.

Cash Items —$19,500 00.
Sundry Holdovers— 8,600 00

These accounts are charged with collection and clearing items received too late to be put through the afternoon clearings Items received by the tellers after the close of banking hours and held overnight in their cages are charged to Cash Items, items which have passed through the clearing department are charged to Sundry Holdovers.

Bills of Exchange—$397,200.00.

This account is charged with notes and drafts received from customers for collection

U S Government Securities—$70,812,000.00.
Other Securities — 12,597,600.00

These two accounts are charged with securities acquired.

Stock in Federal Reserve Bank—$600,000 00.

All banks that are members of the Federal Reserve System are required to subscribe for Federal Reserve Bank stock in an amount equal to 6% of their capital stock and paid-in surplus, only one half of these subscriptions has been called. Stockholders are entitled to 6% cumulative dividends on their paid-up stock.

5% Redemption Fund for Note Circulation—$100,000 00.

National banks with outstanding bank notes are required to maintain with the Treasurer of the United States a 5% redemption fund, and a deposit of Government bonds equal to 100% of the note circulation. Only the 5% fund is carried in this account; the deposited Government bonds are carried in the U. S. Government Securities account.

Call Loans —$2,800,000 00
Brokers' Loans— 3,597,300 00.

Both of these accounts are charged with loans to brokers, secured by readily marketable collateral and payable on demand—usually with twenty-four hours' notice The distinction between the two accounts lies principally in the manner in which the loans are made: Brokers' loans are made by direct negotiation with the brokers; call loans are normally made in the New York call money market through the bank's New York correspondent The interest rate on call loans varies with the call-loan rate in the stock exchange.

Federal Reserve Funds Sold—$150,000 00

This account is charged when portions of the deposits in the Federal Reserve Bank are advanced to correspondent banks.

Bankers' Acceptances—$450,500 00.

This account is charged with the cost of bankers' acceptances purchased in the open market. These drafts usually arise through export and import transactions.

Commercial Paper—$3,337,800.00

This account shows the cost of short-term notes acquired from commercial paper brokers.

Banks' and Bankers' Loans—$2,840,000 00.

The debit balance in this account shows the amount of loans made directly to other banks and bankers.

Commercial Loans—$49,021,500 00.

This account is charged with the amount of direct loans made to customers on their secured or unsecured notes, and of indirect loans made to them by the discounting of notes or acceptances held by them

Advances on Foreign Bills—$145,000 00.

This account is charged with payments made to customers on foreign drafts discounted Because of the greater risk involved in foreign drafts than in domestic drafts, the longer and less definite collection period, the exchange restrictions, and the uncertainty as to the charges which will be made by

the bank's correspondents, banks frequently advance only a portion, usually about 80%, of the discounted value of the drafts, and make a final settlement with the customer after receipt of the collection advice.

Other Loans and Advances—$856,100.00

This account is charged with loans, such as those made on real estate, which do not belong in any of the foregoing classifications.

Customers' Liability on Acceptances Executed—$240,900 00 (debit).
Acceptances Executed—$240,900 00 (credit)
Funds in Anticipation of Maturing Acceptances—$27,300 00 (credit).
Prepayments on Acceptances—$30,000 00 (credit)
Acceptances of this Bank—$40,500 00 (debit)

In the simple acceptance transaction, the bank makes no actual advance of funds, by the act of acceptance, it merely promises to pay the draft at its maturity The bank's customer, by a corollary agreement, promises to turn over to the bank the necessary funds before the maturity date, or authorizes the bank to charge paid acceptances to his account

The bank's liability on the acceptance, although a direct liability, is thus offset by the customer's liability to the bank The following entry is made by the bank at the time of acceptance

Customers' Liability on Acceptances Executed	xx,xxx xx	
Acceptances Executed . .		xx,xxx xx

These two accounts remain on the books until the maturity of the acceptance, when they are reversed.

If the customer pays in the entire amount of the acceptance before its maturity, such payment is credited to the Funds in Anticipation of Maturing Acceptances account Partial payments by customers in advance of maturity are credited to the Prepayments on Acceptances account. Some banks with a small acceptance business do not keep the two latter accounts, but merely credit customers' advance payments to the Customers' Liability on Acceptances Executed account

When the acceptance has matured, it will be presented to the bank for payment; two entries will be required

(1) To reverse the accounts set up at the time of acceptance:

Acceptances Executed . .	xx,xxx xx	
Customers' Liability on Acceptances Executed . .		xx,xxx xx

(2) To record the payment; this entry will vary somewhat according to the circumstances:

(a) If the customer has paid in the entire amount of the acceptance:

Funds in Anticipation of Maturing Acceptances	xx,xxx xx	
Due to Banks (bank presenting acceptance)		xx,xxx xx

(b) If the customer has made a partial payment in advance:

Prepayments on Acceptances (for amount of payment) .	x,xxx xx	
Customer's Deposit Account (for balance) .	x,xxx xx	
Due to Banks		xx,xxx xx

(c) If the customer has made no payment in advance:

Customer's Deposit Account .	xx,xxx xx	
Due to Banks		xx,xxx xx

A bank may purchase its own acceptances in the open market before their maturity, just as it may purchase the acceptances of other banks; such purchases will be recorded in the Acceptances of This Bank account, which appears in the bank's balance sheet under the caption of Loans and Discounts. Purchased acceptances are eliminated from Customers' Liability on Acceptances Executed, and from Acceptances Executed, on the asset and liability sides of the balance sheet, respectively, as shown below (These eliminations are made to prevent a duplication of the asset, and to remove the liability now non-existent)

Resources

Loans and Discounts			
Acceptances of This Bank			$ 40,500 00
Customers' Liability on Acceptances Outstanding			
Customers' Liability on Acceptances Executed.		$240,900 00	
Less			
Funds in Anticipation of Maturing Acceptances	$27,300 00		
Prepayments on Acceptances	30,000 00		
Acceptances Acquired	40,500 00	97,800 00	143,100.00

Liabilities

Acceptances Outstanding.		
Acceptances Executed ..	$240,900 00	
Less Acceptances Acquired .	40,500 00	$200,400 00

The entries to be made at the maturity of an acceptance purchased and carried in the Acceptances of this Bank account, would be the same as those, already described, to be made at the time of the payment of an acceptance, except that the bank would credit Acceptances of this Bank instead of Due to Banks, in entry (2)

Customers' Liability on Letters of Credit—$418,200 00 (debit)
Letters of Credit Issued Under Guarantee—$418,200 00 (credit)
Payments Under Letters of Credit—$12,000 00 (debit)
Letters of Credit and Travelers' Checks Sold for Cash—$26,600 00 (credit).

Commercial letters of credit are documents stating that the issuing bank will honor drafts under certain conditions and within certain limits They are usually issued with the understanding that the customer's account will be charged, not with the amount of the letter of credit issued, but with the amounts of the drafts drawn against the letter and paid by the bank. Typical entries are shown below:

At the time the letter is issued:

Customers' Liability on Letters of Credit .	xx,xxx xx	
Letters of Credit Issued Under Guarantee		xx,xxx xx

(These two accounts represent a contingent asset and a contingent liability, respectively, and may be reflected in the bank's balance sheet by a footnote only)

When sight drafts drawn against the letter of credit are paid by the bank, the entries are:

Payments Under Letters of Credit (or Customer's Deposit Account)	x,xxx xx	
Due from Banks (Domestic or Foreign)		x,xxx xx

The account Payments Under Letters of Credit is charged when, by agreement, the customer is to take up all of the drafts (plus interest) at the exhaustion of the credit, or at a specified future date, rather than at the date of payment by the bank. Otherwise the customer's deposit account is charged.

Letters of Credit Issued Under Guarantee .	x,xxx xx	
Customers' Liability on Letters of Credit		x,xxx xx

When time drafts drawn against a letter of credit are accepted by the bank, the following entries are made·

Letters of Credit Issued Under Guarantee	x,xxx.xx	
Customers' Liability on Letters of Credit		x,xxx xx
Customers' Liability on Acceptances Executed	x,xxx xx	
Acceptances Executed		x,xxx xx

The payment of the acceptances is recorded in the manner discussed in the preceding section, dealing with acceptances.

When letters of credit or travelers' checks are issued for cash, the bank's entry is:

Cash (or Due from Banks)	x,xxx xx	
Letters of Credit and Travelers' Checks Sold for Cash		x,xxx xx

Subsequent payments made by the bank against such letters are charged to the liability account.

Overdrafts—$13,200.00.

When customers' checks are honored in amounts in excess of their credit balances, the resulting debit balances are controlled through this account.

Other Resources—$94,700 00.

Any merchandise or other assets that the bank may have taken over in settlement of a loan, or any miscellaneous receivables, are usually classified as Other Resources.

Capital Stock—$20,000,000.00.
Surplus—$3,000,000 00
Undivided Profits—$950,600 00.

At the time of organization, banks very frequently issue their stock at a premium and thus create an immediate surplus Profits are accumulated in the Undivided Profits account, and transferred to Surplus in round amounts

Contingent Reserve—$159,300 00
Bond Reserve—$182,100 00
Taxes Reserved and Unpaid—$408,000 00.

The Contingent Reserve is intended chiefly as a provision for losses on loans, it is sometimes created by monthly charges to operations, but more frequently by end-of-year provisions

The Bond Reserve is a provision for declines in the value of bonds and other investments The tax reserve is a provision for the tax accrual

Unearned Discount—$171,900 00

This is a deferred credit account, representing discounts deducted in making loans but not yet earned by the expiration of the loan period

Note Circulation—$2,000,000 00

National banks are empowered to issue bank notes, provided they maintain the redemption fund and Government bond deposits previously mentioned The bank's note issue is limited to the amount of its capital stock, and an annual tax of one half of one per cent must be paid for the circulation privilege.

Individual Deposits—Demand—$134,803,600 00.
Special Deposits—$295,000 00
Garnishee Accounts—$6,400 00
Trust Department Deposits—$24,104,000 00
Bank Deposits—Domestic —$38,200,000.00.
Bank Deposits—Foreign —$ 2,883,000.00.

All of these credit balances reflect demand liabilities. Special Deposits include such items as deposits in escrow, balances of deceased persons, and deposits under court jurisdiction Deposits that have been garnisheed by a creditor are not available to the depositor and are controlled by a special account. Trust Department Deposits represent uninvested funds held by the trust department for various trusts. The nature of the other deposit accounts is obvious.

Cashier's Checks—$3,579,000.00
Certified Checks —$2,101,200 00
Expense Checks —$29,900 00.
Clearing House Return Checks—$2,400 00

Cashier's checks are the bank's own checks issued to its customers as a convenience Certified checks are depositors' checks certified by the bank, and consequently segregated from the depositors' accounts. Expense checks are the bank's own checks issued in payment for expenses, and carried as a liability until presented for payment. Clearing house return checks are the bank's own checks, issued to other banks to take up clearing house return items.

Public Funds—$13,853,000 00

These accounts represent municipal, state, and Federal deposits.

Banks are frequently required to deposit Government bonds as collateral for such accounts

Savings Deposits—$28,647,000 00.

These deposits bear interest and are not subject to check. Under ordinary conditions, banks pay such deposits on demand, but the deposit agreement permits the bank to require a thirty-day or a sixty-day notice.

Certificates of Deposit—$210,100 00

These accounts represent interest-bearing time deposits.

Interest and Discount—$2,735,300 00
Exchange—$29,000 00
Foreign Exchange—$3,600 00
Trust Department Earnings—$188,600.00
Rents Received—$45,000 00
Other Earnings—$242,100.00.
Interest Paid or Accrued—$700,600 00.
Expense—$1,307,700 00

The nature of each of these income and expense accounts is apparent from its title

Statements.—The following statements illustrate how the account balances shown by the trial balance are assembled in the income statement and in the statement of condition, or balance sheet. Two statements of condition are presented one showing the assets and liabilities in detail, and another which has been condensed by grouping related items.

THE *X* NATIONAL BANK
Statement of Net Earnings
Year Ended————

Earnings		
Interest and Discount	$2,735,300 00	
Exchange	29,000 00	
Foreign Exchange	3,600 00	
Trust Department Earnings	188,600 00	
Rents Received	45,000 00	
Other Earnings	242,100 00	
Total Earnings		$3,243,600 00
Expenses		
Interest Paid or Accrued	$ 700,600 00	
Operating Expenses	1,307,700 00	
Total Expenses		2,008,300 00
Net Earnings		$1,235,300 00

THE *X* NATIONAL BANK

Detailed Statement of Condition

(Date)

Resources

Cash and Due from Banks		
Cash on Hand	$ 2,363,100	
Federal Reserve Bank—Reserve Account	78,021,000	
Federal Reserve Bank—Transit Account	4,833,000	
Due from Sundry Banks—Domestic	35,173,800	
Transit Account—Domestic	2,031,900	
Exchange from Clearings	3,735,000	
Due from Sundry Banks—Foreign	552,500	
Transit Account—Foreign	35,100	
Coupons and Bonds in Transit	35,700	
Cash Items	19,500	
Sundry Holdovers	8,600	
Bills of Exchange	397,200	$127,206,400
Investments		
U S Government Securities (Pledged, $16,410,000)	$70,812,000	
State and Municipal Bonds and Other Securities	12,597,600	
Stock in Federal Reserve Bank	600,000	
5 % Redemption Fund for Note Circulation	100,000	84,109,600
Loans and Discounts		
Call Loans	$ 2,800,000	
Brokers' Loans	3,597,300	
Federal Reserve Funds Sold	150,000	
Bankers' Acceptances	450,500	
Commercial Paper	3,337,800	
Banks' and Bankers' Loans	2,840,000	
Commercial Loans	49,021,500	
Acceptances of this Bank	40 500	
Payments Under Letters of Credit	12,000	
Advances on Foreign Bills	145,000	
Other Loans and Advances	856,100	63,250,700

Liabilities

Capital, Surplus, and Undivided Profits		
Capital Stock	$ 20,000,000	
Surplus	3,000,000	
Undivided Profits	2,185,900	$ 25,185,900
Reserves		
Contingent Reserve	$ 159,300	
Bond Reserve	182,100	
Taxes Reserved and Unpaid	408,000	
Unearned Discount	171,900	921,300
Note Circulation		2,000,000
Deposits		
Demand		
Individual	$134,803,600	
Special Deposits	295,000	
Garnishee Accounts	6,400	
Trust Department Deposits	24,104,000	
Bank Deposits—Domestic	38,200,000	
Bank Deposits—Foreign	2,883,000	
Certified Checks	2,101,200	
Cashier's Checks	3,579,000	
Expense Checks	29,900	
Clearing House Return Checks	2,400	
Letters of Credit and Travelers' Checks Sold for Cash	26,600	
Total	$206,031,100	
Public Funds	13,853,000	
Total Demand Deposits	$219,884,100	

Accrued Interest Receivable			414,900
Customers' Liability on Acceptances Executed		$ 240,900	
Less			
Funds in Anticipation of Maturing Acceptances	$27,300		
Prepayments on Acceptances	30 000		
Acceptances Acquired	40,500	97,800	143,100
Bank Building			1,300 000
Other Resources			
Furniture and Fixtures		$ 358,400	
Other Resources		94,700	
Overdrafts		13 200	
Prepaid Expenses		157,800	624,100
			$277 048 800

Time		
Certificates of Deposit	$ 210,100	
Savings Deposits	28,647,000	
Total Time Deposits	$ 28,857,100	248,741,200
Acceptances Executed	$ 240,900	
Less Acceptances Acquired	40 500	200,400
		$277,048,800

Note Contingent Liability on Letters of Credit Issued Under Guarantee, $418,200 00

THE *X* NATIONAL BANK

Condensed Statement of Condition

(Date)

Resources		Liabilities		
Cash and Due from Banks.	$127,206,400	Capital Stock		$ 20,000,000
U S Government Securities (Pledged, $16,410,000)	70,812,000	Surplus		3,000,000
State, Municipal, and Other Securities	12,597,600	Undivided Profits		2,185,900
Federal Reserve Bank Stock	600,000	Reserves		921,300
5% Redemption Fund for Note Circulation	100,000	Note Circulation		2,000,000
Loans and Discounts	63,250,700	Deposits		
Accrued Interest Receivable	414,900	Time	$ 28,857,100	
Bank Building	1,300,000	Demand	206,031,100	
Other Resources.	624 100	Public Funds	13,853,000	248,741,200
Customers' Liability on Acceptances Outstanding	143,100	Acceptances Outstanding		200,400
	$277,048,800			$277,048,800

Note. **Contingent Liability on Letters of Credit Issued Under Guarantee, $418,200 00**

CHAPTER 60

STOCK BROKERAGE

Broker's services to his customers.—The principal services rendered by a stock broker to his customers are the following:

(1) Acting as their agents in the purchase and sale of securities The broker is better able to make these purchases and sales for his customers than they are to make them for themselves, because the broker, through his stock exchange memberships and his contacts with other brokers, in the cities in which he maintains offices and elsewhere, has extensive information regarding the demand for and the supply of securities in which his customers desire to trade Since he possesses this information, he is in a position to buy and sell a security at the most advantageous price obtainable in various markets.

The broker's service as agent for his customer also includes the guaranteeing of the accounts arising from sales; in other words, the broker acts as a *del credere* agent.

(2) Providing information with respect to the financial status, earnings, and management of the companies whose securities are purchased and sold by his customers, and also information concerning the changes in the price of these securities.

(3) Assisting his customers in the financing of their purchases. The customer usually deposits with the broker a portion of the purchase price, and the broker advances the remainder of the funds necessary to pay for the securities purchased.

This method of borrowing is a very convenient one for the customer. As no time limit is placed on

the loan, it is not necessary for the customer to arrange for renewals. Moreover, the amount of the loan is flexible, it is determined by the customer's changing requirements, and is increased and decreased to conform with them. Interest rates charged on the customers' accounts are changed when interest rates in the money market increase or decrease

The funds loaned by the broker to his customers are obtained in part from the broker's capital investment, and in part from bank loans. To obtain these bank loans, the broker pledges his own securities or rehypothecates the securities left with him by his customers as collateral to their accounts

(4) Providing facilities for the safekeeping of the securities which his customers leave with him to collateralize their accounts and to facilitate the prompt delivery of securities which they may order him to sell. While the securities are in his possession, the broker renders his customers the further service of collecting the interest and dividends for them

The stock exchange.—The stock exchange provides a convenient place where brokers with orders to sell may meet other brokers with orders to buy. In addition, if a clearing house is operated by the exchange, it greatly facilitates the settlement of transactions. Settlement procedures differ on the various exchanges, but the theory of the clearing house may be illustrated as follows:

On a certain day:

Broker Brown sold Broker Jones 2,000 shares of *B* Company stock for $65,000.00.

Broker Jones sold Broker Smith 3,000 shares of *B* Company stock for $97,800 00

Broker Smith sold Broker Brown 2,000 shares of *B* Company stock for $65,100 00.

Settlements for these transactions require payments of cash and deliveries of securities that may be facilitated by the clearing house, as explained in the summary on the opposite page.

	Brown	Jones	Smith
Cash Receipts and Payments*			
If each broker were obliged to make a separate settlement with each other broker			
Brown would collect from Jones	$65,000	$65,000*	
Jones would collect from Smith		97,800	$97,800*
Smith would collect from Brown	65,100*		65,100
But settlement through the clearing house may be made on the basis of differences, thus			
Brown pays the clearing house	$ 100*		
Smith pays the clearing house			$32,700*
Jones collects from the clearing house		$32,800	
Security Receipts and Deliveries*			
If each broker were obliged to make a separate settlement with each other broker, the number of shares delivered would be			
Brown would deliver to Jones	2,000*	2,000	
Jones would deliver to Smith		3,000*	3,000
Smith would deliver to Brown	2,000		2,000*
But settlement through the clearing house may be made on the basis of differences, thus			
Brown delivers and receives no shares	—		
Jones delivers to the clearing house		1,000*	
Smith receives from the clearing house			1,000

Thus the three transactions, totaling 7,000 shares and $227,900.00, are settled through the clearing house by the following net payments of cash and deliveries of securities:

	Cash		Shares	
	Received	Paid	Received	Delivered
Brown		$ 100 00	—	—
Jones	$32,800 00			1,000
Smith		32,700 00	1,000	
	$32,800 00	$32,800 00	1,000	1,000

Broker's balance sheet: Principal items.—The following illustration shows the items of major importance that appear in a broker's balance sheet:

Balance Sheet—June 30, 1934

Assets	
Cash in Bank	$ 471,000 00
Customers	12,250,000 00
	$12,721,000 00
Liabilities and Net Worth	
Bank Loans	$10,000,000 00
Capital	2,721,000 00
	$12,721,000 00

Broker's security position.—Although the foregoing balance sheet may be a true picture of the broker's financial condition as shown by his general ledger, the following extremely important questions are not answered by it:

What is the market value of the securities left with the broker by his customers as collateral to the accounts totaling $12,250,000 00? Unless these accounts are adequately secured, the broker may suffer losses in their realization.

How adequately are the bank loans secured by the rehypothecation of securities? Unless the bank loans are adequately secured, they may be called and the broker may be placed in financial difficulties

What securities remain "in the box"; that is, in the broker's possession?

To give this important information, the foregoing balance sheet may be amplified as follows:

Balance Sheet—June 30, 1934

	Ledger Balances	Market Value of Securities
Assets		
Cash in Bank	$ 471,000 00	
Customers	12,250,000 00	$17,600,000 00
	$12,721,000 00	$17,600,000 00
Liabilities and Net Worth		
Bank Loans	$10,000,000 00	$15,800,000 00
Securities in the Box		1,800,000 00
Capital . .	2,721,000 00	
	$12,721,000 00	$17,600,000 00

Money and security records.—To provide the information required for a balance sheet in the form just illustrated, and also for the broker's control of his daily operations, his records must include

(1) A double entry system of accounts, similar to that employed by other lines of business, showing the assets, liabilities, income, expense, and capital of the business. The entries in these accounts are, of course, expressed in dollar amounts.

(2) A double entry system of records showing both the

location and ownership of each security under the broker's control. Since market values of securities are continually changing, the security entries are made in terms of number of shares and face value of bonds, market values can be applied to these quantities whenever the determination of market values is required for any purpose.

To show why both of these classes of records are necessary, and how they are both kept on a double entry basis, let us assume that a broker purchases for a customer 200 shares of *Z* Company stock at $20.00 per share. The dollar entries in the ledger accounts will be:

Customer *A*	4,025 00	
Cash		4,000 00
Commissions		25 00

The debit to the customer represents the amount which the broker is entitled to collect from him; the credit to Cash records the broker's disbursement in payment for the stock purchased; and the credit to Commissions shows the broker's earning on the transaction

But the broker has received 200 shares of stock, and he has an obligation to deliver this stock to the customer when the customer pays his account. In other words, in addition to debiting the customer for the price of the stock, $4,025 00, the broker must credit the customer with the 200 shares. Also, the broker's records should show the location of the stock. The facts concerning the securities are therefore recorded by the following debit and credit:

Box	200 shares	
Customer *A*		200 shares

As used in connection with security entries, *debit* and *short* are synonymous, and *credit* and *long* are synonymous. The money debit and the security credit to the customer are posted to his account in the manner illustrated on the following page.

Attention is directed to the columns provided for the security entries It should be noted that the Bought or Received column is a credit, or long, column, but that it appears at the left of the Sold or Delivered column, to

which the debit, or short, entries will be posted

Customer *A*

Date	Bought or Received	Sold or Delivered	Description	Debit	Credit	Balance
Aug 1	200		*Z* Company @ 20 00	4,025 00		4,025 00

The security entry debiting the box and crediting the customer is also posted to the long and short record, or position book, in which a separate sheet or card is devoted to each stock or bond. Various forms of position books are used, but the following illustration will serve our purpose. A debit, a credit, and a balance column are provided for each date, and the date is shown at the head of these columns. The debit and credit entries for the above-stated transaction, and the resulting long and short balances are shown below:

***Z* Company Stock**

	1			2			3		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box	200		200						
Long									
Due to Customers *A*		200	200						

The debit to Box shows the receipt of the securities, and the credit to the customer reflects the broker's obligation to account to the customer for the 200 shares. The position book thus shows both the location and the ownership of the stock.

Exchange settlements.—Under the rules of some stock exchanges, purchases and sales must be settled on the day following the transaction, except that Friday and Saturday transactions are settled on Monday. The New York Stock Exchange provides for settlement on the second day following the transaction. A delay is necessary because the volume of business done by a broker makes it impossible for him, within a single day, to make his purchases and sales on the floor of the exchange, to confirm the transactions with the

other brokers, to complete his records, to make any necessary arrangements for obtaining funds required for the payment of his purchases, and to assemble the securities needed to make deliveries. The exchange also requires time to make up its settlement records.

Because of the elapse of one or more days between the purchase and the payment of cash and receipt of the stock, it might seem that the entries for a purchase of stock should be made as follows.

On the day a purchase contract is made with another broker (say July 30).

Money entries:

Customer *A*	4,025 00	
Clearing House (For broker's liability)		4,000 00
Commissions		25 00

Security entries

Clearing House (For stock receivable)	200 shares	
Customer *A*		200 shares

On the settlement day, when the contract is executed by the payment of cash to, and the receipt of stock from, the clearing house (say August 1):

Money entries:

Clearing House (For payment of liability)	4,000 00	
Cash		4,000 00

Security entries

Box (For stock received)	200 shares	
Clearing House		200 shares

However, if the broker purchases stock for his customer on July 30, but does not pay for and receive the stock until August 1, he cannot properly charge the customer until August 1. If the debit to the customer were made under date of July 30, the broker would charge the customer two days' interest to which he would not be entitled. Hence, it is customary to post-date the purchase and sales entries as of the settlement date, so that both the purchase and settlement are recorded as of the same date. The following entries,

all under date of August 1, would therefore be made for the foregoing transaction:

Money entries.

Customer *A*	4,025 00	
Clearing House		4,000 00
Commissions		25 00
For purchase of stock		
Clearing House	4,000 00	
Cash		4,000 00
For settlement with the clearing house		

Security entries:

Box	200 shares	
Customer *A*		200 shares

It will be noted that, in the money entries, Clearing House is debited and credited $4,000.00 Since these entries exactly offset each other and are made as of the same date, many brokerage houses merely prove the equality of each day's debits and credits to the clearing house in the books of original entry, without posting them to a Clearing House account in the ledger. The posted entries are therefore as follows:

Money entries:

Customer *A*	4,025 00	
Commissions		25 00
Cash		4,000 00

Security entries:

Box	200 shares	
Customer *A*		200 shares

Principal transactions.—The following are the principal transactions affecting a broker's accounts with his customers:

(1) Securities are purchased for the customer.
(2) Securities are sold for the customer.
(3) Cash is received from the customer
(4) Cash is paid to the customer.
(5) Securities are received from the customer.
(6) Securities are delivered to the customer

These events may occur in various sequences. For

instance, a purchase may be made for a customer; on the settlement date, cash may be received from the customer and the securities delivered to him.

Or, a margin deposit may be received from the customer; securities may be purchased and, at a later date, sold. During the period between the purchase and the sale, the customer occupies a long position in the security.

Or, the sequence of purchase and sale may be reversed. If the customer believes that the price will decline, he may make a margin deposit and order his broker to sell, at a subsequent date, he will make a covering purchase. During the period between the sale and the purchase, the customer occupies a short position in the security

Illustrative transactions.—We shall now consider a number of typical brokerage transactions, which differ in the sequence of the events enumerated in the preceding section. It does not appear desirable, within the limitations of a single chapter, to attempt to describe the books of original entry; we shall therefore merely indicate in a summary form the accounts to be debited and credited. A few of the ledger accounts will also be illustrated, to show how money and security entries are made therein. Throughout these illustrations, credit entries are indicated by asterisks.

Cash purchase.—One of the simplest series of brokerage transactions involves:

On one day
  The purchase of securities for a customer.
On the exchange settlement day
  The payment of cash to, and the receipt of stock from, the clearing house; and
  The receipt of cash from, and the delivery of stock to, the customer.

Although these transactions would actually occur on two days, they would be recorded under date of the settlement day To illustrate the method of accounting for this series of transactions, assume that.

(a) A purchase of 200 shares of Z Company stock is made for John White, at $20 00

(b) Payment is made to the clearing house.
(c) The stock is received from the clearing house.
(d) Collection is received from the customer
(e) The stock is delivered to the customer.

The following summary of money and security entries is not intended to illustrate the *form* of any book kept by a broker; it merely indicates the debits and credits in dollars and shares, required to record the foregoing transactions.

	Money Entries				Security Entries	
Transaction	John White	Clearing House	Commissions	Cash	Box	John White
(a)	$4,025 00	$4,000 00*	$25 00*			
(b)		4,000 00		$4,000 00*		
(c)					200	200*
(d)	4,025 00*			4,025 00		
(e)					200*	200

* Credit

The money and security debits and credits to the customer, John White, are posted as follows·

John White

Date	Bought or Received	Sold or Delivered	Description	Debit	Credit	Balance
Aug 1	200		*Z* Company at 20 00	4,025 00		4,025 00
Aug 1		200	*Z* Company		4,025 00	—

The offsetting debit and credit to Clearing House are not posted. The Commissions and Cash accounts are not illustrated; they would contain only the money entries as stated

The security entries are posted to the position book, thus

***Z* Company Stock**

	1								
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box .	(c)200	(e)200	—						
Long									
Due to Customers. John White	(e)200	(c)200	—						

Margin purchase.—This is one of the most common brokerage transactions Instead of settling immediately for the cost of the securities, the customer arranges in advance to have the broker carry the account on margin, in other words, the customer makes a margin deposit of cash and/or securities with the broker, and the broker carries the customer's account for the excess of the purchase price and the commission over the amount of the margin deposit. To illustrate, assume the following transactions:

(f) James Black deposits with the broker $4,500 00 as a margin
(g) The broker purchases 400 shares of *Z* Company stock at $20 00.
(h) The broker pays for the stock.
(i) The stock is received by the broker and held as collateral to the customer's account.

The debits and credits, in dollars and shares, are summarized as follows·

	Money Entries				Security Entries	
Transaction	James Black	Clearing House	Commissions	Cash	Box	James Black
(f)	$4,500 00*			$4,500 00		
(g)	8,050 00	$8,000 00*	$50 00*			
(h)		8,000 00		8,000 00*		
(i)					400	400*

* Credit

The position book sheet for the *Z* Company stock appears as follows:

Z **Company Stock**

	1			2					
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box	(c)200	(e)200	—	(i)400		400			
Long									
Due from Customers									
John White	(e)200	(c)200	—						
James Black					(i)400	400			

Subsequent sale.—In this transaction, James Black, who occupied a long position in *Z* Company stock as a result of the preceding transaction, disposed of part of his holdings.

The Federal tax on sales is paid by the broker, by the application of revenue stamps which the broker purchases for that purpose and carries in an asset account. Assume the following transactions.

(j) The broker sells 100 shares of *Z* Company stock at $22 00
(k) The broker collects the selling price of the stock through the clearing house.
(l) The stock is delivered to the clearing house

The debits and credits, in dollars and shares, are as follows:

	Money Entries					Security Entries	
Transaction	James Black	Clearing House	Commissions	Revenue Stamps	Cash	Box	James Black
(j)	$2,178 50*	$2,200 00	$12 50*	$9 00*			
(k)		2,200 00*			$2,200 00		
(l)						100*	100

* Credit

The customer's account, after these entries have been posted, appears as follows:

James Black

Date	Bought or Received	Sold or Delivered	Description	Debit	Credit	Balance
(f) Aug 2			Cash margin		4,500 00	4,500 00 Cr
(g) 2	400		*Z* Co at 20 00	8,050 00		3,550 00 Dr
(j) 3		100	*Z* Co at 22 00		2,178 50	1,371 50 Dr

The customer now has a debit money balance of $1,371 50, and a long security balance of 300 shares. The position book sheet for the *Z* Company stock is continued as follows:

***Z* Company Stock**

	1			2			3		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box	(c)200	(e)200	—	(i)400		400		(l)100	300
Long									
Due to Customers									
John White.	(e)200	(c)200	—			—			—
James Black					(i)400	400	(l)100		300

Short sale.—In transactions of this type, the customer orders his broker to sell securities which the customer does not own, and which he must therefore purchase at a later date, hoping to do so at a reduced price The broker is expected to deliver immediately the stock thus sold short; and we shall assume, in this illustration, that the broker obtains the consent of James Black to use for this purpose some of Black's shares which the broker is holding as collateral. Assume the following transactions:

(m) George Green deposits with the broker \$2,500 00 as collateral
(n) The broker sells 200 shares of *Z* Company stock at \$24 00
(o) The broker collects for the stock
(p) The stock is delivered to the purchasing broker through the clearing house.

The debits and credits, in money and securities, for these transactions are summarized below:

	Money Entries					Security Entries	
Transaction	George Green	Clearing House	Commissions	Revenue Stamps	Cash	Box	George Green
(m)	\$2,500 00*				\$2,500 00		
(n)	4,757 00*	\$4,800 00	\$25 00*	\$18 00*			
(o)		4,800 00*			4,800 00		
(p)						200*	200

* Credit

The customer's account is shown in the next illustration. The position book entries are shown below.

***Z* Company Stock**

	2			3			4		
	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Short									
Box	(l)400		400		(l)100	300		(p)200	100
Due from Customers									
George Green							(p)200		200
									300
Long									
Due to Customers									
John White			—			—			—
James Black		(l)400	400	(l)100		300			300

Because of space limitations, it is necessary in the position book illustrations to drop one day's entries as each new day's entries are added.

Subsequent purchase.—George Green, who occupied a short position in the *Z* Company stock as a result of the preceding short sale, makes a partial covering purchase. Assume the following transactions.

(q) The broker purchases 100 shares of *Z* Company stock at $22 50.
(r) The broker pays for the stock
(s) The broker receives the stock for Green's account.

The debits and credits, in money and securities, for these transactions are summarized below:

	Money Entries				Security Entries	
Transaction	George Green	Clearing House	Commissions	Cash	Box	George Green
(q)	$2,262 50	$2,250 00*	$12 50*			
(r)		2,250 00		$2,250 00*		
(s)					100	100*

* Credit.

The position book is continued as follows

***Z* Company Stock**

	3			4			5		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box		(l)100	300		(p)200	100	(s)100		200
Due from Customers									
George Green				(p)200		200		(s)100	100
						300			300
Long									
Due to Customers									
John White			—			—			—
James Black	(l)100		300			300			300

The customer's account appears on the following page. This account shows that the customer has a $4,994 50 credit money balance, and a short security balance of 100 shares.

George Green

Date	Bought or Received	Sold or Delivered	Description	Debit	Credit	Balance
(m) Aug 4			Cash margin		2,500 00	2,500 00 Cr
(n) 4		200	Z Co @ 24 00		4,757 00	7,257 00 Cr
(q) 5	100		Z Co @ 22 50	2,262 50		4,994 50 Cr

Sale with failure to deliver.—For various reasons a broker may be unable to make immediate delivery of stock sold. He may have none in the box; or the certificates in the box may not be such as to permit the delivery of the exact number of shares required; or the broker may be unable to obtain, from a customer occupying a long position in the stock, consent to use his shares to make the delivery.

Although exchange rules and brokers' practices regarding sales on which deliveries are not immediately made, vary somewhat in different cities, the following illustrations show the principal accounting requirements

(t) Fred Grey deposits with the broker \$3,500 00 as a margin
(u) The broker sells 300 shares of Z Company stock at \$23 00
(v) The broker finds that he is unable to make delivery of the stock, and he records the "failure" by debiting Failed to Deliver and crediting Clearing House, \$6,900 00, thus showing that the proceeds from the sale are not immediately collectible from the clearing house, but are collectible only when the broker is in a position to deliver the stock

The debits and credits, in money and securities, for these transactions are summarized below·

	Money Entries						Security Entries	
Transaction	Fred Grey	Clearing House	Commissions	Revenue Stamps	Cash	Failed to Deliver	Failed to Deliver	Fred Grey
(t)	\$3,500 00*				\$3,500 00			
(u)	6,835 50*	\$6,900 00	\$37 50*	\$27 00*				
(v)		6,900 00*				\$6,900 00	300*	300

* Credit

The \$6,900 00 debit money balance in the Failed to Deliver account represents the amount that the broker is entitled to receive from the purchasing broker when the stock is delivered The credit, or long, security balance in the Failed to Deliver account reflects the broker's obligation to deliver the 300 shares.

The position book is continued as follows:

Z Company Stock

	4			5			6		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box		(p)200	100	(s)100		200			200
Due from Customers									
George Green	(p)200		200		(s)100	100			100
Fred Grey							(v)300		300
			300			300			600
Long									
Due to Customers									
John White			—			—			—
James Black			300			300			300
Failed to Deliver								(v)300	300
			300			300			600

When the broker is in a position to deliver the stock, the settlement may be made through the clearing house, but it is usually made directly with the other broker. The money entry for the collection of the sale price will be: Debit Cash and credit Failed to Deliver, $6,900.00. The security entry for the delivery of the stock will be: Debit Failed to Deliver and credit Box, 300 shares.

Sale with delayed delivery.—The sale with failure to deliver, just illustrated, was recorded as it would be if the selling broker made no arrangements with the purchasing broker for a delayed delivery, but simply failed to deliver. Arrangements for a delayed delivery may be made in advance. To illustrate the slightly different accounting procedure, assume that, in the preceding illustration, the selling broker had arranged with the purchasing broker for a delay in the delivery of the 300 shares Instead of entry (u) in the foregoing summary, the selling broker would have made the following entries·

Money entries:

Delayed Delivery	6,900 00	
Fred Grey		6,835 50
Commissions		37 50
Revenue Stamps		27 00

Security entries:

Fred Grey	300 shares	
Delayed Delivery		300 shares

Since the money charge was made directly to the Delayed Delivery account, instead of to the Clearing House account, entry (v) is not required

When settlement is made, the selling broker will debit Cash and credit Delayed Delivery, $6,900.00; he will also debit Delayed Delivery and credit Box, 300 shares.

Purchase with failure to receive.—To illustrate the accounting procedure of a broker who has purchased stock from another broker who fails to deliver, assume the following transactions:

(w) The broker receives a margin deposit of $4,500 00 from Henry Brown

(x) The broker purchases 400 shares of Z Company stock at $20 00

(y) The selling broker fails to deliver

The debit and credit entries, in money and securities, are summarized as follows:

	Money Entries					Security Entries	
Transaction	Henry Brown	Clearing House	Commissions	Cash	Failed to Receive	Failed to Receive	Henry Brown
(w)	$4,500 00*			$4,500 00			
(x)	8,050 00	$8,000 00*	$50 00*				
(y)		8,000 00			$8,000 00*	400	400*

* Credit

The $8,000.00 credit balance in the Failed to Receive account shows the purchasing broker's obligation to pay for the stock when it is received; the debit, or short, security balance reflects his claim against the selling broker for the shares not yet received.

The subsequent settlement may be made through the clearing house, but it is usually made directly between the two brokers involved. In the latter case, the purchasing broker's entries are: Debit Failed to Receive and credit Cash, $8,000.00; debit Box and credit Failed to Receive, 400 shares

The position book prior to the settlement appears below.

Z Company Stock

	5			6			8		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box .	(s)100		200			200			200
Due from Customers									
George Green		(s)100	100			100			100
Fred Grey				(v)300		300			300
Failed to Receive							(y)400		400
			300			600			1,000
Long									
Due to Customers:									
John White			—			—			—
James Black			300			300			300.
Henry Brown								(y)400	400
Failed to Deliver					(v)300	300			300
			300			600			1,000

Purchase with delayed receipt.—If, at the time of the purchase, the purchasing broker consents to a delayed receipt, the entries will differ somewhat from those made when the non-delivery is the result of a failure without previous agreement. To illustrate, the transactions in the preceding section, "Purchase with failure to receive," are referred to. In entry (x), the $8,000.00 credit would be made to Delayed Receipt instead of to Clearing House, and entry (y) would then include only the security debit and credit.

Stock borrowed.—A broker who has no available stock with which to make delivery on a short sale may borrow the stock from some other broker. Or, assume that Broker *A* has sold stock to Broker *B* and has failed to deliver; in order to make delivery to his own customer, Broker *B* has a right to buy the stock elsewhere and to charge Broker *A* with the cost thereof. To avoid a possible loss that might result from this threatened "buy-in," Broker *A* may borrow the stock from Broker *C* and deliver it to Broker *B*. When Broker *A* borrows the stock, he gives Broker *C* his check for the market value thereof; he may also give Broker *C* a due bill for the stock, although practice in this respect varies. If the market price of the borrowed stock rises or falls, the

cash deposit with Broker *C* is increased or decreased to keep it "marked to the market." To illustrate, assume the following transactions:

(z) William Rose deposits with the broker \$3,500 00 as a margin
(aa) The broker sells 300 shares of *Z* Company stock at \$23.00
(bb) The broker borrows the stock from Broker *C*
(cc) The selling price is received from, and the stock is delivered to, the clearing house.

The debit and credit entries are summarized as follows.

	Money Entries						Security Entries		
Transaction	William Rose	Clearing House	Commissions	Revenue Stamps	Cash	Stocks Borrowed	Stocks Borrowed	Box	William Rose
(z)	\$3,500 00*				\$3,500 00				
(aa)	6,835 50*	\$6,900 00	\$37 50*	\$27 00*					
(bb)					6,900 00*	6,900 00	300*	300	
(cc)		6,900 00*			6,900 00			300*	300

* Credit

These entries differ from preceding entries for sales only in so far as the debits and credits for the borrowed stock are concerned. The debit money balance in the Stocks Borrowed account represents the broker's right to receive \$6,900.00 from Broker *C* when the borrowed stock is returned to him The credit, or long, security balance in the Stocks Borrowed account shows the broker's obligation to deliver 300 shares to Broker *C* in return for the stock borrowed.

The position book is continued as follows:

***Z* Company Stock**

	6			8			9		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box			200			200	(bb)300	(cc)300	200
Due from Customers									
George Green			100			100			100
Fred Grey	(v)300		300			300			300
William Rose							(cc)300		300
Failed to Receive			—	(y)400		400			400
			600			1,000			1,300
Long									
Due to Customers									
John White			—			—			—
James Black			300			300			300
Henry Brown					(y)400	400			400
Failed to Deliver		(v)300	300			300			300
Stocks Borrowed								(bb)300	300
			600			1,000			1,300

Stock loaned.—A broker who loans stock to another broker and receives a check for the stock thus loaned, will make entries as indicated below:

	Money Entries		Security Entries	
Transaction	Cash	Stock Loaned	Box	Stock Loaned
(dd)	$1,150 00	$1,150 00*	50*	50

* Credit

The credit money balance in the Stocks Loaned account shows the broker's liability to return the cash to the borrowing broker when the stock is returned. The debit, or short, security balance shows the broker's right to receive the 50 shares of stock.

The position book is continued as follows:

Z **Company Stock**

	8			9			10		
Short	Debit	Credit	Balance	Debit	Credit	Balance	Debit	Credit	Balance
Box			200	(bb)300	(cc)300	200		(dd)50	150
Due from Customers									
George Green			100			100			100
Fred Grey			300			300			300
William Rose				(cc)300		300			300
Failed to Receive	(y)400		400			400			400
Stock Loaned							(dd)50		50
			1,000			1,300			1,300
Long									
Due to Customers									
John White			—			—			—
James Black			300			300			300
Henry Brown		(y)400	400			400			400
Failed to Deliver			300			300			300
Stock Borrowed					(bb)300	300			300
			1,000			1,300			1,300

Transactions settled direct.—Some transactions are settled directly by the two brokers involved and do not pass through the exchange and the clearing house. This may occur if the security traded in is not listed on the exchange, or if, although listed, it is so inactive that offset settlements are not made by the exchange. In such instances, each broker debits and credits the other broker in accounts that are kept in the same way as customers' accounts.

For example, assume that Broker *C* buys for the account of a customer 100 shares of Blank Company stock from Broker *D*. The entries on the books of Broker *C* are summarized as follows.

Transaction	Money Entries				Security Entries		
	Customer	Broker *D*	Commission	Cash	Broker *D*	Box	Customer
Purchase	$2,012 50	$2,000 00*	$12 50*		100		100*
Settlement		2,000 00		$2,000 00*	100*	100	

* Credit

The account with Broker *D* would appear as follows:

Date	Bought or Received	Sold or Delivered	Description	Debit	Credit	Balance
July 9		100	Blank Company @ 20 00		2,000 00	2,000 00
July 11	100		Blank Company	2,000 00		—

Bank loans.—In order to be able to carry their customers' accounts, brokers frequently borrow from banks. Bank loans are generally secured by the deposit, as collateral, of securities owned by the broker, or held by him as collateral to his customers' accounts The money entries to record a bank loan are: Debit Cash and credit Bank Loans. The security entries are: Debit Pledged with Banks and credit Box. The shares thus pledged will appear as a short item in the position book.

Stock out for transfer.—When a broker sends stock to the issuing company's transfer agent for the issuance of new certificates, usually in the broker's name, entries are made in the position book, debiting Due from Transfer Office and crediting Box.

Dividends receivable.—To reflect the amounts of dividends receivable on stocks under the broker's control, the portions of such dividends that must be paid to other parties, and the portion that can be taken into income, entries are made for dividend amounts determined on the basis of the position shown by the position book on the date when the stock went ex-dividend To illustrate, assume that the position book showed the following long and short items.

Short

(a) Due from customers.
(b) Due from brokers.

(c) Stocks loaned.
(d) Failed to receive.
(e) Pledged with banks.
(f) Due from transfer office.
(g) Box.

Long

(h) Due to customers.
(i) Due to brokers.
(j) Stocks borrowed.
(k) Failed to deliver.
(l) Stocks owned

Theoretically, the broker should make the following entry:

Accounts Debited and Credited	For Dividends on Items	
Various customers	(a)	
Various brokers	(b), (c), (d)	
Collectible Dividends	(e), (f), (g)	
Various customers		(h)
Various brokers		(i), (j), (k)
Dividends (income account)		(l)

Actually, it may be impossible to determine the amounts to be credited to various customers and to various brokers. Under such conditions, the broker credits customers and brokers with the amounts to which he knows they are entitled, he credits the Dividends account with dividends on the stock which he himself owns, and he credits any unallocated remainder to the Unclaimed Dividends account. The Unclaimed Dividends account is therefore a suspense account representing a liability to parties who, temporarily, cannot be determined

Margin records.—In addition to the accounts with customers, showing money and security entries as already illustrated, brokerage concerns must keep margin records, which show whether or not the customers' accounts are adequately margined. Postings to the margin records and to the customers' accounts are made from the same sources and with the same promptness. The margin records are of extreme importance, as they furnish the information required by the broker to prevent the losses that might arise from a decline in the market value of securities held as collateral

to the account of a customer occupying a long position, or the losses that might be occasioned by a rise in the market value of securities which a customer has sold short. The margin requirement for each stock or bond is separately determined on the basis of legal regulations.

There are several forms of margin records, but the following illustration shows how they may be maintained. Let us assume that a customer has made a margin deposit of $5,000 00, and that he has purchased 400 shares of *Y* Company stock for $8,800.00 and has been charged with the cost thereof plus $50.00 commission His ledger account therefore has a debit balance of $3,850.00 Let us assume, also, that a net margin of $2,800 00 is regarded as adequate for this particular stock; that is, no additional margin will be called for unless the customer's equity in the stock decreases below that amount. The margin card at the time of the purchase will appear as follows.

Name . . .		Address . . .		Telephone .	
LONG	SHORT	SECURITY	PRICE	VALUE	REQUIRED
400		*Y* Company	22	$8,800 00	$2,800 00
(Several	*lines*	*are provided for listing other securities)*			
		Market value (total)		8,800 00	
		Balance (of ledger account)		3,850 00	
		Equity		4,950 00	

The amount shown on the Balance line is the debit balance of the customer's account. The card shows that the value of the stock is $4,950 00 in excess of the customer's debit balance, in other words, the customer has a $4,950.00 equity in the stock on the basis of its present market value. Since only $2,800.00 is required, the account is adequately margined.

If the customer has purchased several securities, the total market value thereof and the total margin required would be shown on the total line; the balance of the customer's account would be deducted from the total market value; and the remainder, or total equity, would be compared with the total requirement.

Let us assume that the price of the *Y* Company stock

drops to $18 00. The entries on the margin card were made in pencil so that they could be easily erased and new figures inserted. The margin card showing the changed margin status appears below:

Name		Address		Telephone	
LONG	SHORT	SECURITY	PRICE	VALUE	REQUIRED
400		*Y* Company	18	$7,200 00	$2,800 00
		Market value (total)		7,200 00	
		Balance		3,850 00	
		Equity		3,350 00	

The equity is still in excess of the $2,800.00 requirement, but further declines in the market value of this security will have to be very closely watched. A decrease of $1.50 per share would reduce the equity to $2,750.00, which is less than the requirement.

Interest charges to customers.—Customers are charged with interest as a consequence of security purchase transactions, but not as a consequence of short sale transactions. To show the reason for this difference, let us assume the following transactions:

A customer makes a margin deposit of $3,000.00, and purchases securities at a cost of $5,525.00, including commission, his account therefore has a debit balance of $2,525 00, representing the amount of funds advanced by the broker, plus the commission charge The broker can therefore properly charge interest on $2,525 00

A customer makes a margin deposit of $2,500.00, and orders his broker to make a short sale that involves a credit to his account in the net amount of $4,657 00 His account therefore has a credit balance of $7,157 00 Obviously, the broker cannot charge his customer any interest, because the broker's capital is not used. Although the broker may be obliged to borrow the stock for delivery and to deposit his own check with the broker who loans the stock, this disbursement is offset by the collection and retention of the proceeds from the sale.

Partners' trading accounts.—If purchase or sales orders are executed for individual members of the brokerage firm, the partners virtually become customers of the firm, and the ledger should show the resulting charges and credits to them in accounts that are kept in the same manner as the customers' accounts The customers' accounts are kept in a subsidiary ledger under the control of a general ledger Customers account. Theoretically, it is undesirable to keep the partners' trading accounts in the subsidiary ledger, but, if machine bookkeeping is used, it may be desirable to do so from the standpoint of convenience In any event, the partners' trading accounts should be set out as separate items in the periodical statements.

Trading Securities account.—If a brokerage firm buys securities for its own account, a Trading Securities account is charged with the cost thereof. When the securities are subsequently sold, entries may be made in either of two ways:

(1) The Trading Securities account may be credited with the cost of the securities sold, and the profit or loss may be taken up immediately by a credit or debit to the Trading Profits account.
(2) The Trading Securities account may be credited with the selling price of the securities sold, at intervals, the unsold securities will be inventoried, and the profit or loss thus ascertained. When the account is operated in this manner, it is similar to an old-fashioned Merchandise account.

This account is generally used to record only those transactions that involve the purchase and subsequent sale of securities, the firm's short sales, with subsequent purchases, are usually recorded in the account discussed below.

Short Sales account.—This account should be credited with the proceeds of short sales made by the firm for its own account, and should be charged with the cost of subsequent purchases Any profits or losses should be reflected in the Trading Profits account.

Syndicate Securities account.—This account should be charged with the cost of securities purchased by the firm as a

member of a syndicate, credited with the proceeds of sales, and recharged with the cost of any securities repurchased from the public for the purpose of maintaining the market or for other reasons Profits may be taken up periodically by inventorying the unsold securities, or the more conservative procedure may be followed of postponing the taking of profit until all of the securities are sold. Profits or losses should be reflected in the Syndicate Profits account, which may also be credited with any amount received from the syndicate manager as the broker's share of the direct syndicate profit.

If the broker is participating in numerous syndicates, the Syndicate Securities account in the general ledger should be operated as a controlling account, with subsidiary records reflecting the operations of each syndicate.

Summary of general ledger accounts.—The typical general ledger accounts of a brokerage firm are listed below. The operation of many of these accounts has been explained in the preceding pages of this chapter.

Asset Accounts

Cash:
Accounts with cash in banks and on hand are operated in the same manner as similar accounts of other businesses.

Stock Clearing Funds:
This account shows deposits made with stock exchanges to guarantee the clearing of transactions.

Revenue Stamps:
This account is charged with the cost of revenue stamps purchased, and is credited with stamps charged to customers to cover the tax on sales or used in connection with the firm's own trading operations.

Customers:
This account controls a subsidiary ledger containing accounts that may have balances of the following four classes:

(1) Debit balances secured by collateral
(2) Credit balances resulting from short sales.
(3) Free credit balances payable to customers.
(4) Unsecured debit balances that may develop if a

broker does not obtain adequate collateral and does not sell the customer's securities before his margin is exhausted.

The periodical statements should show these four classes of balances, as disclosed by the trial balance of the subsidiary ledger, instead of the net balance of the controlling account.

Other Brokers

These accounts will show amounts receivable from brokers as a result of such transactions as sales to them that are to be settled direct instead of through the clearing house.

Failed to Deliver.

The operation of this account was explained on page 585. Its debit balance represents the amount receivable for securities that the broker has failed to deliver.

Delayed Delivery:

This account is similar to the Failed to Deliver account. It is used when a delayed delivery was agreed upon at the time of the sale

Stocks Borrowed.

The operation of this account was explained on page 588. It is charged with cash deposits made with other brokers to assure the return of securities borrowed from them. It may be operated on a controlling account basis.

Notes Receivable

This account is charged and credited in the usual manner.

Collectible Dividends:

The nature of the charges to this account was indicated on page 592.

Partners' Trading Accounts:

These accounts were discussed on page 595. Debit balances should be deducted from the Capital accounts in the balance sheet

Trading Securities:

This account was discussed on page 595.

Syndicate Securities·

This account was discussed on page 595.

Exchange Seat:

This account shows the cost of the broker's seat on the exchange.

Fixed Assets and Reserves·

Accounts with fixed assets, and the related depreciation reserves, are kept in the usual manner

Deferred Charges.

Accounts with prepaid expenses are kept as in any other business

Liability Accounts

Notes Payable:

These accounts show note liabilities, principally to banks

Other Brokers:

These accounts show amounts payable to other brokers as a result of such transactions as purchases from them that are to be settled direct instead of through the clearing house

Failed to Receive:

The operation of this account was explained on page 587. Its credit balance represents the broker's liability to pay for stocks that will subsequently be received on "failed" transactions.

Delayed Receipt:

This account is similar to the Failed to Receive account; it is used when a delay was agreed upon at the time of the purchase.

Stocks Loaned

The operation of this account was explained on page 590. It is credited with the amounts of deposits received from other brokers to assure the return of securities loaned to them.

Unclaimed Dividends and Coupons:

The credits made to this account in connection with dividends were explained on page 592. Similar credits are made in connection with matured coupons on bonds When proof of claim is submitted, payment is made and this account is debited.

Short Sales:

This account is credited with the proceeds from short sales made by the firm for its own account.

Partners' Short Sales:

These accounts are credited with the proceeds from short sales made for the partners' individual accounts.

Accrued Expenses:

Such accounts are operated as in any other business.

Partners' Capital:

These accounts are debited and credited as similar accounts are in any other partnership.

Clearing Accounts

Clearing House:

The debits and credits to this account have been illustrated in the preceding pages. As the debits and credits to this account for each day's transactions should always be equal, brokers frequently omit the postings to the account

The peculiarities of brokerage accounting arise principally in connection with the asset and liability accounts The accounting for income and expense is extremely simple.

Income Accounts

Commissions

Customers' Interest

These accounts are credited with commissions and interest charged to customers

Trading Profits:

Syndicate Profits

These accounts show the profits or losses on the firm's own transactions recorded in the Trading Securities, Short Sales, and Syndicate Securities accounts.

Other Interest

Dividends:

These accounts may be subdivided as much as necessary to furnish the information desired for the operating statements or required for the income tax return.

Expense Accounts

Interest Expense:

Salaries.

Rent

And so forth.

The expense accounts of a brokerage firm do not differ greatly from those of other businesses.

Balance sheet with security values.—The following balance sheet shows ledger balances and related security

values. The questionnaires required by the various stock exchanges include a balance sheet of this nature, although there is considerable variation in the forms used.

X, Y, AND COMPANY

Balance Sheet With Relative Security Valuations

	Book Value		Market Value	
	Debit	Credit	Long Securities	Short Securities and Commitments
Bank Balances	$ 471,200			
Stock Clearing Funds	75,000			
Money Borrowed		$11,500,000		$15,800,000
Stocks Borrowed	6,200		$ 6,100	
Stocks Loaned		10,500		10,300
Failed to Deliver	14,700		15,200	
Failed to Receive		7,800		7,600
Securities in Box and Transfer				8,157,800
Customers' Accounts				
Debit Balances				
Fully secured (This section may be detailed to show different degrees of security)	13,525,000		19,000,000	
Partly secured	89,800		70,000	
Unsecured	10,700		—	
Credit Balances				
With satisfactory equity (This section also may be detailed)		556,400		373,000
Free credits		325,000		—
Partners' Accounts				
Individual accounts	130 600	31,600	144,800	24,900
Investment and trading accounts	133,000		137,500	
Capital		2,000,000		
Profit and Loss		115,000		
Exchange Seats	100,000			
Furniture and Fixtures	10,500			
Notes Receivable	3,700			
Revenue Stamps	6,300			
Unclaimed Dividends and Coupons		1,300		
Reserve for Taxes		8,100		
Reserve for Doubtful Accounts		26,000		
	$14,581,700	$14,581,700	$19,373,600	$19,373,600

QUESTIONS AND PROBLEMS ON CHAPTER 31

QUESTIONS

Question 31-1. What matters should be reduced to agreement in the articles of partnership?

Question 31-2. State five ways of dividing partnership profits

Question 31-3. *A*, *B*, and *C* enter into partnership and agree to invest one half, one fourth, and one fourth of the capital, respectively They further agree that interest at 6% shall be credited on excess, and charged on deficiency, of capital The actual investments are: *A*, \$10,000 00; *B*, \$7,000 00; and *C*, \$5,000 00 State what entry or entries should be made at the end of the year for the interest

Question 31-4. What is the object of allowing interest on capital as a method of dividing part of the profits? Would there be any object in allowing interest on capital if the remaining profits were divided in the capital ratio?

Question 31-5. In examining the partnership accounts of Black and Brown, you ascertain that the capital of \$20,000 00 has been contributed equally, and that the articles of partnership provide that, if any excess capital is supplied by either partner, interest at the rate of 5% per annum shall be allowed Black pays in \$5,000.00 additional and is credited at the end of the year with \$250.00 interest, which is debited to Brown State whether you consider this procedure correct, and give reasons for your answer

Question 31-6. What distinction, if any, would you make between salaries of partners and their drawings as affecting the profit and loss statement?

Question 31-7. State where the following items should appear in the profit and loss statement of a partnership:

Interest on partners' capital
Interest on one partner's capital in excess of his agreed contribution
Interest on partners' loans
Interest on partners' drawings.

Question 31-8. *A*, *B*, and *C* are partners *C* manages the business and is to be allowed a bonus of 20% of the profits as salary The remaining profits are to be divided equally. The profits, before the bonus is computed, are \$15,000.00. How should they be divided? Discuss contracts of this kind, stating what difficulties may arise in the absence of a specific agreement Write two forms of agreement, providing, in unmistakable terms, for two different methods of computing the bonus

PROBLEMS

Problem 31-1. From the following particulars prepare a statement of the capital accounts of the firm of *A*, *B*, and *C* for the six months ending June 30, 1934.

Profits are divisible in the following proportions: *A*, 45%; *B*, 30%, *C*, 25% Interest at 5% per annum is to be credited on capitals The net profits before adjustment of interest are \$28,600 00. The partners have drawn on the last day of each month as follows. *A*, \$360 00; *B*, \$240 00; *C*, \$200 00 These Drawing accounts have not been charged off. The capitals on December 31, 1933, were as follows: *A*, \$98,000 00, *B*, \$48,000.00; *C*, \$40,000 00

State also whether, in your opinion, it is necessary to charge interest on the drawings, and give reasons for your opinion, especially with respect to this particular case

Problem 31-2. *A*, *B*, *C*, and *D* are partners *A*, *B*, and *C* operate separate stores and are entitled to bonuses on the profits of their respective stores, as follows: *A*, 15%, *B*, 10%, *C*, 20%. *D* is in charge of all buying and general administration, and is entitled to a bonus on the profits of each store as follows: *A*'s store, 5%; *B*'s store, 4%; *C*'s store, 2%. The profits of the separate stores, before bonuses were allowed, were.

A's Store	\$10,000 00
B's Store	25,000 00
C's Store	20,000 00
Total	\$55,000 00

Profits remaining after the bonus payments, are to be divided equally Prepare statements showing the division of the profits, on the following assumptions.

(1) The bonuses are not to be regarded as expenses.

(2) Each managing partner's bonus is to be regarded as an expense of his store, which may be deducted to determine the profits on which his bonus is based; *D*'s bonus is then to be regarded as an expense to be deducted from the

profits remaining after payment of bonuses to managing partners, to determine the profits on which *D*'s bonuses are based.

(3) Each managing partner's bonus and *D*'s bonus on the profits of each store are to be regarded as expenses which may be deducted to determine the net profits on which bonuses are based

Problem 31-3. *A*, *B*, and *C* agree to start in business with a capital of $100,000 00, of which *A* is to furnish $60,000.00 and *B* and *C* are to furnish $20,000 00 each *A* is to have a one-half interest in the business, and *B* and *C* are each to have a one-quarter interest Interest at 6% is to be credited on excess, and charged on deficiency, of capital *A* contributes $60,000 00, *B*, $15,000.00, *C*, $18,000 00 Profits for the year are $20,500 00. How would the Capital accounts stand on the books after closing?

Problem 31-4. *M* and *N* are attorneys in partnership, sharing earnings equally *R* and *S* are also conducting a law firm, and sharing earnings in the ratio of two thirds and one third. Both firms decide to consolidate on January 1, 1933, on the basis of the following balance sheets:

	M and *N*	*R* and *S*
Cash	$ 8,600 00	$ 4,000 00
Accounts Receivable	20,200 00	22,100 00
Library and Equipment	6,400 00	7,000 00
	$35,200 00	$33,100 00
M, Capital	$15,700 00	
N, Capital	19,500 00	
R, Capital		$24,500 00
S, Capital		8,600 00
	$35,200 00	$33,100 00

It is agreed that the income shall be recorded in such a manner as to show the amount arising from service to old clients of each firm and from service to new clients; that the expenses shall then be prorated on the basis of the gross earnings from the three classes of clients, that the partners of each old firm shall be entitled to 75% of the net income on service to its former clients, to be divided in the profit and loss ratio formerly existing between them; that interest at 6% shall then be allowed to the old partnerships on their several investments (exclusive of accounts receivable), that the remaining net income shall be divided equally between the two former firms and then to the former members thereof in the profit and loss ratio formerly existing between them; and that losses on

collection of old accounts receivable shall be regarded as losses of the old firms

At the end of the year it is found that the results have been as follows:

Fees.	
Clients of *M* and *N* .	$50,000.00
Clients of *R* and *S*	70,000 00
New Clients	30,000 00
Expenses	45,000 00
Losses on Collections	
M and *N* Accounts Receivable	1,800 00
R and *S* Accounts Receivable	3,000 00

Prepare a statement showing the division of the profits, and a statement of partners' capitals

Problem 31-5. Sam Weiss and Frank Hyde entered into partnership on January 1, 1933, by consolidating their businesses The assets and liabilities of the two businesses on January 1, 1933, were as follows.

	Weiss' Grocery	Hyde's Market
Assets		
Cash..	$ 5,375 00	$ 4,650 00
Accounts Receivable	8,725 00	5,640 00
Inventory	5,400 00	1,200 00
Building .	10,500 00	20,085 00
Furniture and Fixtures	3,200 00	6,060 00
Prepaid Expenses	630 00	200 00
	$33,830 00	$37,835 00
Liabilities		
Accounts Payable.	$ 7,330 00	$ 5,700 00
Capital	26,500 00	32,135.00
	$33,830 00	$37,835 00

The businesses occupied adjoining stores. They were operated as departments of the new business, with separate books of account

Titles to the store buildings were retained in the names of the individual partners, the partnership renting the buildings for two years, at an annual rental of $2,000.00 for Weiss' store and $3,000 00 for Hyde's store.

The agreement provides that the partners shall receive interest at 6% on their capital investments, and that the interest credited to each partner shall be chargeable against the profits of his department, if a department shows a profit after the interest charge, 40% of such profit shall be credited to the managing partner as a bonus, and the remainder shall be divided in the ratio of 60% to the managing partner and 40% to the other partner

The books were kept by single entry, and the following state-

ments were drawn off at the end of the year:

Grocery

Assets:		
Cash	$ 3,675 00	
Accounts Receivable	11,250 00	
Inventory	4,800 00	
Furniture and Fixtures	3,200 00	
Prepaid Rent	4,000 00	
Other Prepaid Expenses	525 00	$27,450.00
Liabilities:		
Accounts Payable	$ 2,950 00	
Due to Market	4,500 00	7,450 00
Net Assets		$20,000 00

Market

Assets		
Cash	$ 1,250 00	
Accounts Receivable	1,800 00	
Inventory	900 00	
Due from Grocery	4,500 00	
Furniture and Fixtures	6,060 00	
Prepaid Rent	6,000 00	
Other Prepaid Expenses	125 00	$20,635 00
Liabilities.		
Accounts Payable		12,175 00
Net Assets		$ 8,460 00

Each partner withdrew $300.00 per month during the year. It was agreed that the furniture and fixtures should be depreciated at the rate of 15%

Prepare statements to show the computation of the profit of each department, and the distribution of such profit, a statement of the partners' capital accounts, and a balance sheet of the business, with columns for each department.

Problem 31-6. Bigler, Hawthorne, and Maynard agree to divide their partnership profits in the ratio of the amounts of sales made by each partner, after allowing monthly salaries of $300 00, $275 00, and $250 00, respectively The partners are to be individually responsible for the cost of merchandise sold on uncollectible accounts

At the end of a year, their books show:

Bigler's sales	$28,820 00
Hawthorne's sales	21,000 00
Maynard's sales	30,000 00
Net profits, before charging partners' salaries.	13,500 00

Bigler and Hawthorne have not drawn their December salaries.

They decide to rescind the salary agreement, treating any salary drawn as an advance, but otherwise dividing the profits according to the original arrangement.

The following facts are to be taken into consideration:

Office furniture costing $65 00 has been charged to expense

Funds amounting to $500 00, lent by Hawthorne, have been credited to his Salary account.

There are unrecorded and unpaid expenses totaling $375 00

Accounts receivable of $320 00 from Bigler's sales are uncollectible

All sales were made at a gross profit of $66\frac{2}{3}\%$ on cost

State the journal entries necessary to adjust the accounts, and prepare a corrected Profit and Loss account and a statement of the distribution of the profits.

Problem 31-7. From the following data, prepare:

A profit and loss statement.
A balance sheet.
A statement of partners' capitals.

Trial Balance—December 31, 1933

Cash	$ 8,000 00	
Accounts Receivable—Customers	75,000 00	
Inventory—January 1, 1933	125,000 00	
Accounts Payable		$ 15,000 00
Notes Payable		60,000 00
Sales		500,000 00
Purchases	323,000 00	
Salaries and Store Expenses	125,000 00	
Bad Debts	2,500 00	
Interest on Notes Payable	6,000 00	
Alexander, Salary	3,500 00	
Brown, Salary	4,000 00	
Clark, Salary	3,000 00	
Alexander, Capital		50,000 00
Brown, Capital		30,000 00
Clark, Capital		20,000 00
	$675,000 00	$675,000 00

Brown owns the store The partnership occupies it under an agreement providing for an annual rent of $6,000 00, payable in advance in monthly installments The rent has not been paid, and is now to be credited to Brown, together with interest at 6% per annum on the monthly installments.

Of the interest paid on notes payable, $750 00 applies to the period subsequent to December 31, 1933 There are accrued taxes of $1,000 00, and accrued wages of $1,500 00 A reserve of $1,500.00

is necessary for bad and doubtful accounts. The inventory on December 31, 1933, is valued at $155,000 00.

Of the profits, if any, after giving effect to those adjustments, 10% is to be credited to Bonuses to Department Managers and Salesmen Income tax is to be ignored The bonus is not to be regarded as an expense, in determining the basis of the bonus

Interest at 6% per annum is to be credited to the partners on their capitals, and remaining profits are divisible in the following proportions:

Alexander	45%
Brown	30
Clark	25

QUESTIONS AND PROBLEMS ON CHAPTER 32

QUESTIONS

Question 32-1. Does the dissolution of a partnership necessarily involve the discontinuance of the business and the distribution of the assets among the partners? Explain fully

Question 32-2. What is the distinction between buying an interest in a partnership and making an investment in a partnership? How would the records of the two transactions differ?

Question 32-3. How would you record the fact that *F*, with the consent of *B*, bought *A*'s interest in the partnership of *A* and *B* at a price in excess of the amount of *A*'s Capital account?

Question 32-4. Two partners agree to admit a third partner. Before the admission of the new partner, a Goodwill account is to be placed on the books What entry should be made, and in what ratio will the two original partners be credited? State why this ratio is used.

Question 32-5. *A* and *B* are partners, sharing profits in accordance with their original investments. *A* invested $5,000.00 and *B*, $3,000 00, making the capital of the firm $8,000.00. They sell a one-third interest in the business to *C* for $8,000.00. How shall *A* and *B* divide the $8,000 00 received from *C* so that each may retain a one-third interest in the business without increasing or decreasing the original capital of the firm?

Question 32-6. *A* and *B* are equal partners, with capitals of $20,000 00 each. They agree to admit *C* to a one-third interest in the capital and the profits if he will pay in $23,000 00 They allow him to decide whether a goodwill of $6,000.00 shall be placed on the books, in which case he will be credited with the entire $23,000.00 that he will pay in; or whether no goodwill shall appear on the books, in which case he will be credited with $21,000 00. He asks your advice as to the better option

Would your advice be any different if *C* were to have one third of the capital but receive only one fourth of the profits, *A* and *B* sharing the remaining three fourths equally?

PROBLEMS

Problem 32-1 Smith and Bailey have just contributed $52,500.00 and $31,500 00, respectively, to a partnership Morton offers $48,000 00 for a one-third interest in the capital and profits The money is to be paid to Smith and Bailey personally, who are to transfer from their Capital accounts to Morton's Capital account sums sufficient to leave a balance of $28,000 00 at the credit of each partner's Capital account

At this point a dispute arises over the proper method of dividing the $48,000 00 between Smith and Bailey. Smith submits the following propositions:

(1) The $20,000 00 profit on the transaction should be divided between Smith and Bailey in proportion to the original capital contributions, $52,500 00 and $31,500 00, or 62.5% and 37 5%. In support of this division it is contended that the profit is not a partnership profit, because the money is not to remain in the business Hence the profit and loss ratio does not govern the division of this profit.

(2) The $20,000 00 profit should be divided in the ratio in which Smith and Bailey transfer capital credits to Morton: that is, in the ratio of $24,500.00 and $3,500.00

On the other hand, Bailey insists that they are taking Morton in as an equal partner, and giving him an equal share in the capital and profits, therefore what he pays should be divided equally

How do you think the money should be divided? Give your reasons

Problem 32-2. *A* and *B* are equal partners. Their balance sheet on December 31, 1934, is as follows:

Assets	
Cash	$ 500.00
Accounts Receivable	40,000 00
Merchandise Inventory	35,000 00
Investments	5,000 00
Furniture and Fixtures	2,500 00
	$83,000 00
Liabilities	
Accounts Payable	$31,000 00
Bank Loan	15,000 00
A, Capital	20,000 00
B, Capital	17,000 00
	$83,000 00

C is to enter the firm Preliminary thereto, *A* and *B* write off bad debts amounting to $5,000 00, and write off furniture and fixtures 20%, merchandise inventory 10%, and investments 20% *A* and *B* are allowed a goodwill of $5,000 00

C will pay in $10,000 00 for a one-third interest, and the partners are to adjust their capital accounts to equality by personal cash payments.

Give the necessary journal entries, and the balance sheet of the new firm

Problem 32-3. D. R Williams and E C Forbes, partners, propose to take into partnership B L Beatty, who conducts a similar business. The balance sheets of both businesses appear below:

Balance Sheets—October 31, 1935

	Williams and Forbes	B L Beatty
Assets		
Cash	$ 550	$ 680
Accounts Receivable	1,600	2,100
Inventory	8,500	4,200
Store Property	10,000	
Furniture and Fixtures	1,000	800
	$21,650	$7,780
Liabilities		
Accounts Payable	$ 3,100	$1,100
Reserve for Depreciation—Store Property	1,000	
Reserve for Doubtful Accounts	250	100
D R Williams, Capital	9,300	
E C Forbes, Capital	8,000	
B L Beatty, Capital		6,580
	$21,650	$7,780

It is proposed to consolidate the two businesses on the following basis:

Williams and Forbes	
Store Property—Worth New	$13,000
Depreciation	2,000
Accounts Receivable—Net Value	1,200
Goodwill	2,000
B L Beatty:	
Accounts Receivable—Net Value	1,700
Furniture and Fixtures Not to be Taken Over—Sold by Beatty for	650

All other assets are taken at book values, and all liabilities are assumed

Beatty is to contribute enough additional cash to make his capital one half of the combined capitals of Williams and Forbes;

the latter are to adjust their capitals by a cash payment from one to the other, so that all partners will have an equal interest in the capital of the new partnership.

Make all necessary entries on the books of Williams and Forbes to reflect the admission of Beatty under the above-described conditions, and prepare a balance sheet of the new partnership.

Problem 32-4. *A* and *B* invest \$20,000.00 and \$16,000 00, respectively, in a partnership, agreeing to share profits in the capital ratio. They spend \$10,000 00 for equipment and \$26,000.00 for merchandise Before they actually start business, *C* offers to buy a one-third interest in the business for \$18,000 00 *A* agrees to sell, provided *B* will pay him a bonus of \$2,000.00 out of his (*B*'s) share *B* agrees, and the sale is made.

How should the \$18,000 00 be divided between *A* and *B* so that the interests of all partners will be equal?

Problem 32-5. K. B. Chester was employed from May 1, 1933, to December 31, 1934, as manager of a retail store owned by Otto Kaye At the time Chester took charge of the store, the balance sheet of the business was as follows:

Cash	\$ 595 00	Accounts Payable	\$1,915 00
Accounts Receivable	900 00	Otto Kaye, Capital	6,700 00
Inventory	5,120 00		
Fixtures	2,000 00		
	\$8,615 00		\$8,615 00

During the period mentioned above, the following transactions occurred.

Merchandise purchases.	
For cash	\$1,200 00
On account	3,965 00
Merchandise sales.	
For cash	9,500 00
On account	5,950 00
Chester's salary paid, \$200 00 per month	4,000 00
Other expenses paid	875 00
Withdrawals by Kaye	2,460 00

On December 31, 1934, the trade accounts receivable total \$1,240 00 (after bad accounts of \$280.00 are written off); the trade accounts payable total \$2,650 00, and the inventory is \$3,200 00.

Chester desires to be taken in as a partner, and the following agreement is reached:

(1) Chester is to pay Kaye \$3,500 00, for which Kaye will transfer one half of his capital as of May 1, 1933

(2) Chester is to manage the store, and, in lieu of salary, is to receive a bonus of 40% of profits before bonus and distribution to partners, remaining profits are to be divided equally.

(3) The above clause is to go into effect as of May 1, 1933, except that, for the past period, interest at 6% per annum is to be allowed Kaye

(4) After the books are closed on December 31, 1934, the partner with the lesser capital is to invest enough money to equalize the partners' interests.

Prepare a profit and loss statement (double entry form) for the period (allow depreciation on the fixtures at the rate of 15% per annum); a statement of partners' capitals, showing the contribution required by (4), above, and a balance sheet of the partnership.

QUESTIONS AND PROBLEMS ON CHAPTER 33

QUESTIONS

Question 33-1. *A* and *B* are partners, dealing in wholesale drugs *A* dies in 1933. His widow objects to a statement offered by *B*, as a basis of settlement, on the ground that the stock of merchandise is listed by *B* at cost, whereas during the six months preceding the death of *A* the average value of the drugs has increased 50% over the original cost What settlement would you suggest as being equitable, giving your reasons? State how the settlement that you suggest should be dealt with in the books of *B*.

Question 33-2. Mention the chief points to be observed in reporting upon the accounts of a partnership in which you are acting on behalf of a retiring partner, when the business is to be continued by the remaining partners.

Question 33-3. Assume that, at the time of the withdrawal of a partner, it appeared impractical to attempt to value the accounts receivable. It was therefore decided to adjust the withdrawing partner's account at the end of two years and to make final settlement with him at that time with respect to accounts receivable What method of accounting would you recommend to facilitate the determination of the subsequent payments to be made to the retiring partner?

Question 33-4. *A*, *B*, and *C* are partners, sharing profits equally *C* is to retire. The goodwill of the business is valued at $12,000 00 Give journal entries showing two methods of placing the goodwill on the books, and state which method is preferable.

Question 33-5. As bookkeeper for a firm having no articles of partnership, what action would you take on learning of the death of a partner?

Question 33-6. Are there any circumstances under which you would regard it as entirely permissible to defer the closing of the books after the death of a partner until the close of the accounting period?

Question 33-7. *X* and *Y* are partners, having capitals of

$30,000 00 and $50,000 00, respectively, and sharing profits equally. They sell their business to a corporation, receiving stock of a par value of $100,000.00 How should this stock be divided in each of the following cases?

(a) The contract stipulates that the business shall be sold for the sum of $100,000.00, payable in stock at par.
(b) The contract stipulates that the business shall be sold for $80,000 00, payable in stock of a par value of $100,000 00.

Question 33-8. The Best Store Company was incorporated for $50,000 00 on March 31, 1932, by the three partners, *A*, *B*, and *C*. The chango in organization was not given effect upon the books. Proprietary interest on January 1, 1932, was $75,000.00. The profits for the year 1932, determined in January, 1933, are found to be $10,000 00. Business was uniform throughout the year 1932. State how you would correct this condition on the books in February, 1933.

PROBLEMS

Problem 33-1. The December 31, 1932, balance sheet of Lathrop and Mogg, who shared profits in the ratio of 7 and 3, appeared as follows.

Accounts Receivable	$ 16,300 00	Accounts Payable	$ 16,000 00
Inventory	31,000 00	Notes Payable	10,000 00
Fixed Assets	60,000 00	Bank Overdraft	1,300 00
		Lathrop, Capital	50,000 00
		Mogg, Capital	30,000 00
	$107,300 00		$107,300 00

Contingent liability on notes receivable discounted—$15,000 00

Lathrop wished to retire, and the assets were taken over by Mogg at the following values

Accounts receivable	$15,000 00
Inventory	30,000 00
Fixed assets	55,000 00

Mogg assumed all liabilities, and was allowed $500 00 by Lathrop for accepting sole liability on the discounted notes.

Prepare a statement showing the amount Lathrop should have received from Mogg

Problem 33-2. The articles of partnership of the firm of Wells and Jones contain the following provisions:

(a) The books are to be closed on December 31 of each year.
(b) The Profit and Loss account is to show only operating profits

and is to be closed by credits as follows:

To Wells: 50%

To Jones: 40%.

To a Reserve for Contingencies. 10%. (This reserve shall be charged with expenses extraneous to operations.)

(c) In the event of the death of a partner, his estate shall be entitled to:

(1) The capital at his credit at the date of his death

(2) His proportion of the reserve for contingencies at the date of his death

(3) His proportion of the profits between the date of the last closing and the date of his death—the profits to be based on the average operating profits of the last three completed years

(4) Goodwill equal to his share of the net operating profits for the past two completed years

Wells died on April 1, 1934, at which date his Capital account carried a credit balance of $25,000 00, and the Reserve for Contingencies carried a credit balance of $8,550.00

The following is an analysis of the Reserve for Contingencies.

	Credits		
Profits 1930		$1,160 00	
Profits 1931		2,556 00	
Profits 1932		3,620 00	
Profits 1933		3,274 00	$10,610 00
	Debits		
Fire Loss 1933			2,060 00
Balance			$ 8,550 00

State what amount is payable to the estate

Problem 33-3. White, Burns, Mays, and Allen have been in partnership for three years. Allen now desires to withdraw The articles of partnership originally provided that the partners should each be permitted to make cash drawings of $200 00 monthly against profits These amounts were drawn the first year, the drawings were increased the second year to $250 00 monthly, and the third year to $350.00 monthly

You are called upon to determine the amount to which Allen is entitled. You find that drawings have been charged to Profit and Loss, and that depreciation and bad debts have been recorded incorrectly It is agreed that proper adjustment shall be made for these items.

An analysis discloses the following facts with regard to bad debt losses:

	First Year	Second Year	Third Year	Total
Losses charged off	$ 600	$2,820	$1,505	$4,925
Reserve now required				2,060
Losses as redistributed	2,110	2,205	2,670	$6,985

Depreciation is to be adjusted on the basis of the following facts:

	Buildings	Equipment
Beginning of first year	$15,250 00	$4,200 00
Beginning of second year	16,950 00	4,200 00
Beginning of third year	19,200 00	4,950 00
End of third year	21,080 00	6,050 00
Rate of depreciation provided	2%	5%
Rate of depreciation desired	4%	10%

Additions during the year were depreciated at one half of the annual rates.

Profits have been credited annually to the partners' Capital accounts in the agreed profit and loss ratios

Following is an abstract of the Capital accounts:

	White	Burns	Mays	Allen
Investments	$ 8,000	$20,000	$12,000	$20,000
Profits				
First Year	285	855	570	1,140
Second Year	660	1,650	1,210	1,980
Third Year	1,505	3,612	3,010	3,913
Capitals, End of Third Year	$10,450	$26,117	$16,790	$27,033

The partnership agreement provides that, in the event of the withdrawal of any partner by mutual consent at the end of any year, the goodwill of the partnership shall be valued at twice the amount by which the profits of the last year exceed 6% of the partnership capital at the beginning of that year

Show what amount Allen is entitled to receive.

Problem 33-4. Four partners share profits by allowing interest on capitals at 6% per annum and dividing the remainder equally The partnership agreement provided that, in the event of the death of any partner, there should be paid to the legal representative of the deceased.

(A) The balance in his Capital account at the date of his death.
(B) Minus the balance in his Drawing account at the date of death.

(C) Plus a share of the profits of the year of his decease, consisting of
  (1) Interest at 6% per annum on his capital from the preceding December 31 to the date of his death,
  (2) A share of the remaining profits estimated on the basis of:
    (a) The average of his share of such remaining profits for the last three completed years.
    (b) The portion of the year between the date of death and the preceding December 31.

(D) Plus interest at 6% per annum from the date of death to the following December 31, on the total determined in accordance with paragraphs (A) to (C), inclusive.

The surviving partners were to share the remaining profits equally

C died on June 30, 1934 The total profits of the three immediately preceding years were $219,600.00 Each partner had drawn annually in prior years his exact share of the total profits, and no partner had made any additional investments.

With the aid of the following trial balance on December 31, 1934, taken before depreciation has been charged, prepare a profit and loss statement for 1934 Allow $250 00 for depreciation of office furniture and fixtures, and $3,000 00 for depreciation of building, plant, and machinery Also construct a balance sheet, showing what was due to the deceased's estate and what capital stood to the credit of each of the surviving partners

The inventory on December 31, 1934, was $125,000.00.

Trial Balance—December 31, 1934

A, Capital		$ 120,000 00
B, Capital		110,000 00
C, Capital		100,000 00
D, Capital		90,000 00
A, Drawing	$ 12,000 00	
B, Drawing	12,000 00	
C, Drawing	5,000 00	
D, Drawing	12,000 00	
Inventory, December 31, 1933	100,000 00	
Purchases	1,775,000 00	
Factory Wages and Salaries	250,000 00	
Discounts Received		20,000 00
Sales		2,110,000 00
Cash	19,500 00	
Bad Debts	16,000 00	
Notes Receivable	15,000 00	
Office Salaries	9,000 00	
General Office Expenses	2,500 00	

Accounts Receivable	$ 414,000 00	
Traveling Expenses	10,000 00	
Taxes—Factory	1,000 00	
Rent and Taxes—Office	2,000 00	
Land	10,000 00	
Building	60,000 00	
Plant and Machinery	15,000 00	
Office Furniture and Fixtures	2,500 00	
Notes Payable		$ 50,000 00
Accounts Payable		150,000 00
Interest Expense	7,500 00	
	$2,750,000 00	$2,750,000 00

Problem 33-5. Whitcomb and Riley were partners whose balance sheet on June 30, 1934, disclosed the following financial condition:

Cash	$ 6,000	Accounts Payable	$ 40,000
Accounts Receivable	48,000	Notes Payable	45,000
Notes Receivable	5,000	Whitcomb, Capital	70,000
Inventories	55,000	Riley, Capital	50,000
Land and Buildings	40,000		
Machinery and Equipment	48,000		
Furniture and Fixtures	3,000		
	$205,000		$205,000

The business is incorporated as The Whiley Company, on the following plan:

(1) Capital stock, authorized—$150,000.00
(2) The corporation takes over the entire assets and liabilities of the partnership at the book figures, except. (a) real estate of a book value of $5,000 00, which is retained by the firm; and (b) the accounts receivable, which are taken over at $46,000 00.
(3) $30,000.00 is allowed for the goodwill of the business.
(4) Payments to the partnership are made as follows: $50,000.00 in first mortgage bonds, and the balance in capital stock
(5) The remainder of the capital stock is sold for cash at par to sundry persons

The real estate retained by the partnership is bought by Whitcomb for $7,000.00; this amount is to be charged to his account.

Prepare:

(a) Closing entries for the books of the partnership
(b) A statement of the partners' accounts.
(c) Entries to open the books of the corporation

Problem 33-6. The following data apply to the first three years of a partnership's operations:

	Original Invest-ments	P and L Ratio	Drawings
First Year:			
A	$50,000 00	50%	$6,500 00
B	30,000 00	20	5,500 00
C	30,000 00	20	5,000 00
D	20,000 00	10	2,600 00
Second Year			
A		35	5,800 00
B		25	3,900 00
C		25	4,100 00
D		15	2,700 00
Third Year			
B		30	7,000 00
C		30	6,000 00
D		20	4,000 00
E	30,000 00	20	5,000 00

The profits for the three years, as shown by the books, were $20,000 00, $35,000 00, and $15,000.00

A died at the end of the second year, and his estate was paid the amount shown to his credit The estate was explicitly relieved of any further liability with respect to the affairs of the partnership

E was admitted at the beginning of the third year with an investment as shown above, represented by his personal notes After the books were closed at the end of the third year, it was found that the inventories had been overstated at each annual closing in the following amounts:

End of Year	Overvaluation
1	$ 3,000 00
2	6,250 00
3	12,570 00

The notes given by *E* as representing his investment, and additional notes taken from him during the year in the amount of $5,000 00, were worthless Prepare a statement of the partners' accounts, showing how they would appear after adjustment for the above-stated facts.

QUESTIONS AND PROBLEMS ON CHAPTER 34

QUESTIONS

Question 34-1. Why should losses and gains on realization be divided among the partners before any liquidating payments are made to them?

Question 34-2. What is the order of priority in the payment of equities, in the liquidation of a partnership?

Question 34-3. *A* and *B* enter into partnership on January 1, 1933, investing \$20,000 00 and \$16,000 00, respectively, and making no agreement regarding the division of profits The business is unsuccessful, and it is decided to liquidate. On November 30, after converting all assets into cash and paying all liabilities, the partners find that they have \$27,000.00 in cash to divide Between January 1, and November 30, 1933, *A* has drawn \$2,000 00 and *B* has drawn \$1,000 00. A dispute then arises concerning the division of the \$27,000 00 *A* claims that the money should be divided in the capital ratio—five ninths and four ninths *B* contends that, since they made no agreement, they are equal partners, and hence the \$27,000 00 should be divided equally You are asked for your opinion. Write a letter to the partners, showing how you think the \$27,000 00 should be divided, and giving your reasons

Question 34-4. State two errors frequently committed in dividing the cash among the partners of a liquidating partnership

Question 34-5. What is meant by the right of offset in partnership liquidations?

Question 34-6. How should you distribute the cash on hand in liquidating a partnership, if, after charging off losses.

(a) One partner has a credit balance and the other has a debit balance?
(b) Two partners have credit balances and one has a debit balance?
(c) A partner has a debit balance in his Capital account and a credit balance in a Loan account?

Question 34-7. *F* and *G* have capitals of \$25,000 00 and \$3,000 00, respectively *G* manages the business and is allowed a salary. Two thousand dollars of his salary has not been paid, and it appears as a credit in an account called *G*, Salary All assets have been realized, all liabilities have been liquidated, and there is \$22,000 00 of cash for division between the partners. State how this money should be divided

Question 34-8. Because the profit and loss ratio in a given partnership differed from the capital ratio, some of the partners had debit balances and others had credit balances after all losses were charged off The assets were not sufficient to pay the liabilities. Could the creditors collect from any partner, or would they have to collect from only those partners who had debit balances, on the theory that the partners with credit balances had equities in the partnership assets similar to those of the creditors?

Question 34-9. *A*, B, and *C* are in partnership. Their capitals on June 15, 1933, are \$4,000 00, \$20,000 00, and \$34,000 00, respectively. The balance sheet shows assets of \$68,000 00 and liabilities of \$10,000 00. The partnership is dissolved and the assets are sold for \$50,000 00

A has outside assets of \$2,000.00 and owes outside liabilities of \$3,000 00, *B* has outside assets of \$5,000 00 and owes outside liabilities of \$7,000.00; *C* has outside assets of \$15,000 00 and owes outside liabilities of \$2,500 00

State the rights of the firm creditors, and of *A*, *B*, and *C*, or their creditors, in the \$50,000.00 received from the sale of the partnership assets

PROBLEMS

Problem 34-1. Stevens, Carl, Jones, and Brown are partners, sharing profits in the ratio of $3/21$, $4/21$, $6/21$, and $8/21$. The balances of their Capital accounts on December 31, 1933, are as follows:

Stevens	\$ 1,000 00
Carl	25,000 00
Jones	25,000 00
Brown	9,000 00
Total	\$60,000 00

The partners decide to liquidate, and they accordingly convert all assets into cash and pay all liabilities They have \$22,200 00 to divide How shall it be distributed?

Problem 34-2. *A* invested \$3,000.00 and *B* invested \$4,000 00 in a partnership that is about to dissolve The firm owes \$6,000 00,

of which \$1,500 00 is due A, and \$1,000 00 is due B; and has \$8,000 00 in cash Prepare a statement showing the closing Profits and losses are to be divided equally.

Problem 34-3. A, B, and C are in partnership. A invested \$11,000.00; B invested \$5,700 00, and C invested \$1,300 00 Their agreement provides that profits or losses shall be divided as follows: A, four ninths, B, three ninths, C, two ninths

The partnership has become insolvent and is therefore dissolved The liabilities have been paid, and there is \$9,000 00 of cash on hand as the only asset How should this cash be divided?

Problem 34-4. Bemis and Burrell are partners, sharing profits and losses equally The partnership is dissolved on December 31, 1934, at which time the accounts contain the following balances:

Trade Creditors	\$17,500 00
Bemis, Capital	12,000 00
Burrell, Capital	3,000 00
Bemis, Loan	5,000 00
Burrell, Loan	2,500 00

The assets of the firm are disposed of for \$32,000.00 cash. Prepare a statement showing the proper distribution thereof.

Problem 34-5. D, E, and F began business on January 1, 1933, investing \$9,000 00, \$12,000 00, and \$15,000.00, respectively, and agreeing to share profits in the capital ratio.

The bookkeeper undertook to keep a double entry system of accounts, but failed to keep them in balance. It was decided to liquidate the business, and on May 31, 1935, the assets, with the exception of real estate, had been converted into cash The bookkeeper was told to close the books and to determine the interests of the several partners. He closed the drawings to the Capital accounts and attempted to prepare a trial balance which resulted as follows:

Cash	\$15,825 00	
Real Estate	4,600 00	
Note Payable, 6%, Dated February 1, 1935, Due in Six Months		\$15,000 00
D		4,200 00
E	9,650 00	
F		4,275 00
Sales		16,165 00
Expenses	12,875 00	
	\$42,950 00	\$39,640 00

On June 10, 1935, the real estate was sold for \$6,200 00, the

note and interest were paid at maturity

Prepare a statement showing the several interests of the partners on May 31 and July 31, 1935 (assuming no transactions in the interim other than those indicated above), and the distribution of all cash on July 31.

Problem 34-6. Fred Smith and George White have been in business for three years ending December 31, 1934, on which date they agree to dissolve partnership Smith takes over the business. White is paid out of partnership funds the amount of his capital at the date of his withdrawal and a sum of $6,000.00 for his share of the goodwill Smith has drawn out $2,000.00 each year and White has drawn $3,000 00 each year. Smith's capital at the start was $10,000.00, and White's capital was $12,500.00. After White's withdrawal Smith draws up the following condensed balance sheet

Goodwill	$6,000 00
Other net assets	3,500 00
Capital	$9,500 00

Prepare a statement of the partners' capital accounts, showing the amount paid to White upon retirement

Problem 34-7. G. W Shelley and S. E Mayo enter into partnership on January 1, 1933, investing $24,000.00 and $18,000 00, respectively, and sharing profits in the capital ratio. They operate two offices, one under the management of each partner Receipts and disbursements of business cash during the year, handled through the partners' personal bank accounts, are as follows

	Shelley	Mayo
Receipts	$50,925 00	$41,330 00
Disbursements	32,140 00	50,965 00

The business, exclusive of any cash, is sold on December 31, 1933, for $50,000 00 How should the $50,000 00 be divided between the partners?

QUESTIONS AND PROBLEMS ON CHAPTER 35

QUESTIONS

Question 35-1. Wherein lies the danger of making liquidating distributions to partners before the assets are all realized and the liabilities all paid?

Assume that all partnership liabilities have been paid, but that the partnership assets have not all been realized. How can a liquidator safeguard himself if he wishes to make partial payments to the partners?

Question 35-2. Assume that a partner had a Loan account and a Capital account, and that the sum of the balances of both accounts was less than his possible losses on future realization The other partner had only a Capital account, but its balance exceeded his possible loss Would it be permissible to waive the rule requiring payments of loans before capital and to make a payment on the second partner's Capital account before making any payments on the first partner's Loan account?

Question 35-3. You have been appointed liquidator of the firm of *A*, *B*, and *C*, whose balance sheet appears as follows:

Cash	\$ 5,000 00	*A*, Capital	\$30,000 00
Other assets	45,000 00	*B*, Capital	15,000 00
		C, Capital	5,000 00
	\$50,000 00		\$50,000 00

State how you would divide the \$5,000.00 cash

Question 35-4. Referring to the preceding question, assume that *B* and *C* insist that the money should be divided in the capital ratio: \$3,000 00 to *A*, \$1,500.00 to *B*, and \$500.00 to *C*. Explain why this division would be unwise

Question 35-5. You have been appointed liquidator of the firm of *X* and *Y*, whose balance sheet appears as follows:

Cash	\$ 5,000 00	*X*, Capital	\$25,000 00
Other assets	40,000 00	*Y*, Capital	15,000 00
		Y, Loan	5,000 00
	\$45,000 00		\$45,000 00

To which partner would you pay the $5,000 00 cash on hand? Or, would you divide it?

PROBLEMS

Problem 35-1. Prepare working papers and statements of capital accounts showing the first distribution to partners in each of the following cases:

Condition at beginning of liquidation, after payment of liabilities:

		Profit and Loss Ratios		
Partners	Capitals	Case 1	Case 2	Case 3
A	$20,000.00	40%	20%	15%
B	25,000 00	15	25	35
C	15,000 00	15	20	15
D	5,000 00	5	15	20
E	10,000 00	25	20	15
Total	$75,000 00	100%	100%	100%
Cash for division	5,000 00			
Remainder	$70,000 00			
Cash on hand to be held for expenses, etc	1,000 00			
Non-cash assets	$69,000 00			

Problem 35-2. The condition of a partnership on June 30, 1934, is shown in the following statement.

Cash	$ 5,000 00	
Other Assets	105,000 00	
Liabilities		$ 10,000 00
A, Capital		13,500 00
B, Capital		10,000 00
C, Capital		31 500 00
D, Capital		15,000 00
A, Loan		10,000 00
B, Loan		12,000 00
D, Loan		8,000.00
	$110,000 00	$110,000 00

Losses and gains are shared equally. The non-cash assets are realized in three installments as follows:

	Installments		
	First	Second	Third
Assets realized	$15,000	$42,000	$48,000
Loss	2,000	6,000	10,000
Cash obtained	$13,000	$36,000	$38,000
Expenses paid from the proceeds of realization	500	800	1,200
Net cash proceeds	$12,500	$35,200	$36,800

All cash available after each periodical realization is distributed Prepare working papers and statement of partners' accounts showing the distributions

Problem 35-3. *A*, *B*, *C*, and *D* have decided to dissolve partnership. To that end, they have liquidated all their liabilities, and at the date of the first division of cash among the partners the conditions are as follows.

Partners	Partners' Capitals	Partners' Loans	P & L Ratio
A	$24,000 00	$ 8,000 00	40%
B	21,000 00	6,000 00	30
C	14,000 00	14,000 00	20
D	9,000 00	14,000 00	10
Totals	$68,000 00	$42,000 00	100%
Cash available for distribution			$ 21,000 00
Other assets not yet realized (of doubtful value)			89,000 00
Total			$110,000 00

State which partners should participate in the distribution of the $21,000 00; how much cash each should receive; and whether the payments should be applied against the Capital accounts or the Loan accounts. Explain the procedure of determining the distribution Assume that none of the partners has any private property.

Problem 35-4. *P*, *Q*, *R*, and *S* enter into partnership with a capital of $100,000 00. *P* invests $40,000.00, *Q*, $30,000 00; *R*, $20,000 00; and *S*, $10,000 00. They are to share profits and losses in the following proportion *P*, 40%; *Q*, 25%, *R*, 20%, and *S*, 15%. At the end of six months there is a loss of $13,000 00; in the meantime the partners have drawn against prospective profits as follows. *P*, $2,400 00; *Q*, $1,600 00; *R*, $1,600 00; and *S*, $1,400.00.

They dissolve partnership and agree to distribute the proceeds of firm assets The realization and liquidation lasts four months and the transactions are as follows:

Month	Assets Realized Book Value	Loss On Realization	Liabilities Paid
First	$ 27,690 00	$ 500 00	$ 7,900 00
Second	47,800 00	650 00	6,100 00
Third	17,510 00	240 00	3,800 00
Fourth	7,000 00	210 00	2,200 00
	$100,000 00	$1,600 00	$20,000 00

Prepare a statement showing your recommendations of how the

monthly distributions should be made to the partners.

Problem 35-5. Four partners, who are about to liquidate, close their books and draw off the following statement:

			P and L Ratio
A, Capital		$ 40,000 00	30%
B, Capital		30,000 00	20
C, Capital		40,000 00	20
D, Capital		25,000 00	30
Liabilities		20,000 00	
Cash	$ 5,000 00		
Other Assets	150,000 00		
	$155,000 00	$155,000 00	

It is agreed that *A*, *B*, and *C* shall be free immediately to enter other businesses, and that *D* shall liquidate the business, and be allowed a commission, payable in cash and chargeable as a partnership expense, of 2% of all cash collected

The following is a summary of the liquidation You are to determine the commissions allowable to *D*, and to show the monthly distributions to the partners.

	First Month	Second Month	Third Month	Fourth Month
Assets realized	$40,000	$35,000	$30,000	$45,000
Loss	1,000	1,000	1,000	5,000
Cash collected	$39,000	$34,000	$29,000	$40,000
Expenses paid	320	320	420	600
Balance	$38,680	$33,680	$28,580	$39,400
Payments to creditors	8,000	4,000	5,000	3,000
Balance	$30,680	$29,680	$23,580	$36,400

Prepare working papers and a statement of the partners' capital accounts.

QUESTIONS AND PROBLEMS ON CHAPTER 36

QUESTIONS

Question 36-1. State two general methods which may be used to record the transactions of a joint venture, and state what considerations will determine which method will be used.

Question 36-2. Assuming that a separate set of books is to be maintained for a joint venture, describe the record that will be kept on these books and on the books of the participants for:

(a) Merchandise contributions.
(b) Cash contributions
(c) Expenses paid from the venture funds.
(d) Expenses paid by one of the participants.
(e) Sales.
(f) Cash withdrawals.
(g) Closing of books and distribution of profit.
(h) Final cash settlement

Question 36-3. Assuming that a separate set of books is not to be kept, describe how each participant will record each of the transactions listed in the preceding question

Question 36-4. How should uncompleted ventures be shown in the balance sheet?

PROBLEMS

Problem 36-1. Joy and Evans were shipping merchandise to Australia on joint account. Evans gave Joy $3,200 00 in cash and his four-month acceptances in the amount of $5,000.00 Joy was to provide the balance of the cash required, manage the venture, and receive a commission of 3% of the invoices of merchandise purchased for the venture. Profits were to be divided equally.

Joy paid Plant & Greer $12,000.00, for merchandise, and discounted Evans' acceptances at a 2% discount, charging the discount to Evans. Joy paid freight, $450 00, and insurance, $100.00. In due time Joy received an account sales for merchandise sold and a draft for the net proceeds, $6,200 00, out of which the acceptances were retired

Later, Joy received a draft for $9,100 00, the net proceeds of the

sale of the remaining merchandise The joint account was closed, and a check for the balance due was given to Evans

Prepare journal entries, the Joint Venture account, and the account with Evans, as they would appear on the books of Joy

Problem 36-2. On January 1, 1933, A, B, C, and D individually held stock in the Repeal Brewing Company as follows

A	6,000 shares
B	4,000 shares
C	4,000 shares
D	1,000 shares

The stock had all been acquired at par, \$1 00 per share

On May 1, 1933, A, B, C, and D formed a pool by contributing their holdings thereto at an equitable valuation, and by purchasing from X 10,000 shares of the stock of the same company at the market price, \$8.00 per share. The parties were to share equally in the purchase from X, and they were to participate in the joint venture in accordance with the shares originally held and with the purchase from X on joint account.

In order to buy X's stock on May 1, the entire purchase price was borrowed at 6% on that date from the Wall Street Bank, all the stock held in the pool being given as security for the loan.

On June 10, 1933, the Repeal Brewing Company issued rights to buy one share of stock at \$5 00 for every four shares owned. The pool borrowed money from the bank on June 18, 1933, and took up its rights, depositing the stock with the bank.

Sales of stock were made as follows:

10,000 shares @ \$14 00 per share for settlement June 22.
6,000 shares @ 18 50 per share for settlement June 24.
7,000 shares @ 13 00 per share for settlement July 3
4,000 shares @ 19 00 per share for settlement July 20

As the proceeds of the various sales were obtained on the dates mentioned, the bank was paid off and the remaining funds were deposited. The bank charged interest for the actual number of days of the loans, but used 360 days to the year in computing interest.

On July 31, it was decided to wind up the pool and to distribute the stock and cash Prepare a Joint Venture account showing the result of the above transactions, and a statement of the division of the cash and of the shares unsold, among the participants

Problem 36-3. Roy Ellis contracts with Owen Young that Ellis is to furnish capital toward the purchase and development of the Rivervale subdivision, and Young is to sell it for their joint

account Young is to receive no salary for his services, and the profits are to be divided equally

On May 1, 1932, they purchase the 30 acres comprising the subdivision, at \$3,500.00 per acre, paying one half in cash from Ellis' funds, and giving a 6% mortgage for the balance.

The property is subdivided into 200 lots of equal size, 80 of which are listed to sell at \$900 00 each, and the balance at \$1,200 00 each. In computing the profit on sales, the cost of the two classes of lots is assumed to be in the same ratio as the selling price Lots may be released from the mortgage by paying to the trustee under the mortgage, cash equal to 125% of the original cost of the lot (computed as indicated above) and the accrued interest on the portion of the mortgage released

The property is first improved by grading, and so forth, at a cost of \$15,000 00, paid by Ellis

During July, Ellis and Young sell 61 of the \$900 00 lots and 27 of the \$1,200 00 lots; during August, they sell 15 of the \$900 00 lots and 65 of the \$1,200 00 lots. All of the lots are sold for one-half cash and one-half mortgage notes, the notes are indorsed without recourse and sold to banks at a 3% discount The lots are released from the purchase money mortgage by payment of the pro-rata amount, releases being obtained and payments to the trustee being made on the last day of each month

The expenses of advertising and selling, amounting to \$11,000 00, are paid by Young from the proceeds of the sales deposited in his account. He also makes the payments on the mortgage

Prepare a Joint Venture account showing the record of the transactions Also prepare a profit and loss statement and a balance sheet after closing the accounts on August 31, 1932.

Problem 36-4. Samuel George, who is in the real estate business, arranges with Y E. Stevens and Arthur Corona to purchase a parcel of ground and to erect buildings for sale or rent. Contributions of capital and distributions of profits are to be equal

George takes from Henry Gamble title to 200 feet of land at 3030–34 Simons Avenue for a consideration of \$9,000 00, paying \$4,000 00 cash and giving back mortgages on the property at 3034 for \$2,000.00 and at 3030 for \$3,000 00 He pays \$70 50 for bringing the abstract down and for recording fees.

He sells a 20-foot strip off the back of the property for \$920.00 cash

Twin houses are erected by Corona on the remaining property at a cost of \$7,015.00 each. A mortgage of \$5,000.00 on each of the pieces of property is executed jointly by the three partners, and the proceeds of the two mortgages are turned over to Corona in

part payment for the houses. The mortgagee, however, deducts $60.75 insurance premium on the two houses before turning over the proceeds.

George pays Corona $1,500 00 in cash.

Corona renders a bill of $810.10 for a garage and extras on the property at 3030.

The property at 3030 is sold to Max Tosty for $15,150 00, $500 00 earnest money being received.

Stevens and Corona each pay $1,000 00 to George, who pays off the original mortgage on this property, plus interest of $41.10 Tosty then assumes the $5,000 00 mortgage on the property, including interest amounting to $210 00, and gives back a second mortgage of $3,500.00, paying the balance in cash

The profit on the property sold need not be calculated, nor need separate accounts be opened for the respective pieces.

Record these transactions on the books of George, and draw a trial balance of the syndicate transactions; then show what amount should be paid by one or more members of the joint account to others, to equalize their respective investments

Problem 36-5. Nine men went on a fishing trip. *A*, *B*, *C*, *D*, *E*, *F*, *G*, and *H* were with the party six days; *K* left at the end of three days. Each was to pay his car fare, fishing license fee, and any personal expenses. The cost of board and room at the resort, guides' fees, bait, tips, and so forth, was to be charged to each member of the party in proportion to the time spent

The bill rendered by the resort at the end of six days included the following items.

Fishing licenses—*B*, *G*, *K*	$ 9 00
Board and room	240 00
Guides	60 00
Packing fish for shipment	2 50
Cigars—*B*	2 00
Long distance telephone—*D*	1 75
Total	$315 25

Cash was contributed for the payment of this bill, as follows

A	$ 50 00
B	45 00
C	30 00
D	55 00
E	40 00
F	29 00
G	25 00
H	41.25
Total	$315 25

Other payments made by members of the party for group expenses were

A—Rent of boats at High Lake	$ 4 00
D—Rent of boats at Fishtrap Lake	4 00
E—Airplane ride—As B, F, and K were not on this trip, they are not to be charged with any of the expense	15 00
H—Tips	5 00
Total	$28 00

D was asked to prepare a report showing the final settlement. To those who had paid more than their proportion of the joint expense, he remitted his personal checks; those who had paid less than their proportion of the expense were requested to remit to D Prepare a report such as D might have rendered.

QUESTIONS AND PROBLEMS ON CHAPTER 37

QUESTIONS

Question 37-1. State how to set up and close a Fire Loss account, explaining what items should be charged and credited to it.

Question 37-2. Explain why the inventory at the date of a fire may be underestimated by the gross profit method, if the inventory at the date of the last closing was written down to a market value below cost or was written down because of depreciation or obsolescence

Question 37-3. What is meant by the co-insurance clause? How would you proceed to determine the amount which could be collected under a policy carrying the co-insurance clause?

Question 37-4. A company has insured the life of its president for its own benefit, and is carrying on its balance sheet the amount of premiums paid. What position should an auditor take in regard to these premiums?

PROBLEMS

Problem 37-1. The Jensen Company marks up all merchandise 60% to determine selling prices. The last inventory was taken on December 31, 1931, at which time the cost value of merchandise on hand was $30,000 00 On May 3, 1934, a fire occurred The inventory taken immediately thereafter showed.

Undamaged merchandise—marked to sell at $5,600 00
Damaged material which can be salvaged—marked to sell at $3,000 00; estimated value, $450 00

On the basis of the following information, determine the loss from the fire

	Year Ended December 31 1932	Year Ended December 31 1933	January 1 to May 3, 1934
Sales . .	$176,000 00	$205,000 00	$65,000 00
Less. Discount on Sales	$ 10,000 00	$ 18,200 00	$ 6,100 00
Returned Sales	8,000 00	6,500 00	2,700 00
Freight Out .	9,150 00	13,100 00	5,950 00
Total .	$ 27,150 00	$ 37,800 00	$14,750 00
Net Sales .	$148,850 00	$167,200.00	$50,250 00

Purchases	$110,000 00	$135,000 00	$50,000 00
Less Returned Purchases	2,500 00	1,050 00	1,000 00
Net Purchases	$107,500 00	$133,950 00	$49,000 00

Problem 37-2. On January 1, 1921, the Schuman Works purchased land for $15,000 00, erected buildings for $50,000 00, and acquired machinery costing $35,000 00 No capital additions were made, and on January 1, 1934, a balance sheet of the company discloses the following financial condition·

Assets		Liabilities	
Cash	$ 10,000	Accounts Payable.	$ 30,250
Accounts Receivable	65,000	Reserves for Depreciation·	
Inventory	30,000	Buildings	13,000
Land	15,000	Machinery	22,750
Buildings	50,000	Capital Stock	100,000
Machinery	35,000	Surplus.	39,000
	$205,000		$205,000

On March 10, 1934, the factory is totally destroyed by fire The books of account as on that date show the following ledger balances.

Cash	$ 15,000	Accounts Payable	$ 21,000
Accounts Receivable	50,000	Reserves for Depreciation	
Inventory, January 1	30,000	Buildings	13,000
Land	15,000	Machinery	22,750
Buildings	50,000	Capital Stock	100,000
Machinery	35,000	Surplus	39,000
Purchases	167,000	Sales.	291,250
Labor and Factory Cost .	60,000		
General Expense	65,000		
	$487,000		$487,000

For the past three years, the books showed an average rate of gross profit of 30%.

The company succeeds in recovering from the insurance company $50,000 00 for merchandise The insurance company acknowledges that replacement cost of the buildings and machinery is higher than book value, and these two items are settled as follows buildings, $40,000 00; machinery, $17,500 00.

The company erects new buildings costing $60,000 00, and purchases machinery costing $30,000 00. The land is recorded at its market value of $25,000 00.

Prepare journal entries to record properly all of the above facts, including losses or gains due to the fire, and actual trading profit from January 1, 1934, to date of fire. Draw up a balance sheet after making the above entries.

Problem 37-3. A company organized January 1, 1934, suffers a total loss of its merchandise just before taking inventory, on December 31, 1936 The books disclose the following facts:

	1934	1935	1936
Inventory, Beginning of Year	$ 78,240 98	$ 51,894 68	$ 40,396 40
Purchases	195,541 57	235,316 50	157,185 09
Allowances on Purchases	13,900 12	19,774 63	7,145 04
Sales	262,282 06	291,634 69	178,410 45
Allowances on Sales	2,297 37	7,834 50	5,179 25

(a) Determine the value of the merchandise destroyed, and the amounts recoverable under the following concurrent policies containing a 90% co-insurance clause.

X Co	$12,000 00
Y Co	15,000 00
Z Co	13,000 00

(b) If the merchandise loss had been 50%, what amounts would have been recoverable?

Problem 37-4. A cloak-manufacturing concern, turning out but one grade of cloaks, was robbed on May 7, 1933, and forthwith filed a claim for $11,200.00 under a burglary insurance policy it was carrying

The proof of loss filed by the assured contained two items: namely, 400 cloaks valued at $10,000.00, and 1,000 yards of silk stated to be worth $1,200.00

The insurance company, notified of the loss, immediately ordered an inventory to be taken, which disclosed the following quantities on the morning of the eighth.

1,050 cloaks
3,250 yards of cloth
2,100 yards of silk.

On the same day, you were called in by the insurance company to examine the books for the purpose of proving or disproving the claim, and obtained the following information.

(1) On January 1, 1933, a complete inventory had been taken of the cloaks, cloth, and silk on hand While the inventory sheets had subsequently been lost or destroyed, the books showed that the total valuation was $25,310.00, and the firm's representatives assured you that this was correct and that the inventory had been properly valued at cost prices, which had not fluctuated since

(2) The cloth and silk purchases since January 1, 1933, had amounted to 10,750 yards of cloth and 3,000 yards of silk at $.65

and $1.00 per yard of each fabric, respectively

(3) Two thousand cloaks had been manufactured during the same period, and 1,800 cloaks had been sold.

You determined that the manufacturing cost was as follows:

Material	$ 8 00	per garment
Labor and other expenses	4 50	" "
Total	$12 50	" "

Give the gist of your report to your client

Problem 37-5. You are engaged to prepare amended Federal income tax returns for the calendar years 1933 and 1934, for a client who has been required to change from the cash to the accrual basis What adjustments are necessary in order to change to the accrual basis, in connection with the following insurance account? Make any other adjustments necessary to correct the books.

Insurance Account—Debits

1933		
May 1	Fire Insurance Premium on Building, Covering Period from May 1, 1933, to April 30, 1935	$ 4,400 00
Aug 15	Fire Insurance Premium on Stock, Covering Period from July 1, 1933, to June 30, 1934	1,800 00
31	Employees' Fidelity Insurance, Covering Period from August 1, 1933, to July 31, 1934	6,000 00
Sept 15	Fire Insurance Premium on Equipment, Covering Period from September 1, 1933, to August 31, 1936	4,200 00
Oct 21	Due from Fidelity Insurance Company on Shortage of Bonded Employee .	1,500 00
		$17,900 00
1934		
Feb 1	Premium on Truck Liability Insurance, October 1, 1933, to October 1, 1934*..	$ 3,600 00
June 1	Additional Fire Insurance on Building, Covering Period from June 1, 1934, to May 31, 1936	2,400 00
Aug 10	Fire Insurance Premium on Stock, Covering Period from July 1, 1934, to June 30, 1935	1,500 00
Nov 1	Shortage of M. Meyers to be Paid by Fidelity Insurance Company	300 00
		$ 7,800 00

* This policy was renewed for one year at a premium cost of $3,000 00, which has not yet been paid.

Insurance Account—Credits

1933		
Nov 1	Refund Due to Reduction in Rate of Employees' Fidelity Insurance	$ 400 00
Dec 31	Transferred to Profit and Loss	17,500 00
		$17,900 00

1934			
Feb	1	Recovery from Fidelity Insurance Company on 1933 Shortage	$ 1,500 00
Dec	31	Transferred to Profit and Loss	6,300 00
			$ 7,800 00

Your work sheet should indicate clearly the adjusted insurance expense for each of the years affected Also give the correcting journal entry or entries to bring the client's books into accordance with your amended tax returns Consideration should be given only to the accounts as stated, and transactions prior to these should be ignored

QUESTIONS AND PROBLEMS ON CHAPTER 38

QUESTIONS

Question 38-1. Distinguish between a balance sheet and a statement of affairs

Question 38-2. For what two general purposes may a statement of affairs be prepared? In what way will statements prepared for these two purposes differ?

Question 38-3. What relation does the Deficiency account bear to the statement of affairs?

Question 38-4. Why is the balance sheet classification of assets usually an illogical one to use in a statement of affairs?

How should the asset side of a statement of affairs be classified?

Can you think of any circumstances under which the balance sheet classification of assets might properly be used in a statement of affairs?

Question 38-5. Explain the methods used in a statement of affairs for:

(a) Offsetting fully secured liabilities and the security.
(b) Offsetting partially secured liabilities and the security.
(c) Indicating the special rights of creditors having priority.

Question 38-6. What are valuation reserves? How may they be shown in the statement of affairs and in the Deficiency account?

Question 38-7. A balance sheet is handed you with the request that you prepare a statement of affairs This balance sheet shows the following items

Capital stock	$50,000 00
Surplus—January 1	12,000 00
Dividends paid during the year	10,000 00
Loss for the year	19,000 00

How would you show these facts in the statement of affairs and in the Deficiency account?

Question 38-8. Some state laws impose a double liability on

the stockholders. That is, if the corporation becomes insolvent, the stockholders are liable for additional payments equal to the par value of the stock held by them. How would you show this condition in the statement of affairs?

Question 38-9. How would you show in the statement of affairs the contingent liability on notes receivable discounted?

PROBLEMS

Problem 38-1. Prepare a statement of affairs and a Deficiency account as of December 31, 1934, from the following information relative to the financial condition of The Willard Company:

Cash		$ 1,800
Accounts Receivable		
Good	$ 3,500	
Doubtful (Estimated to Realize 50%)	500	
Bad	900	4,900
Notes Receivable:		
Secured	$ 2,500	
Unsecured (Estimated Value, $800 00)	1,000	3,500
Inventories (Estimated Value, $30,000 00)		35,000
Store Furniture (Estimated Value, $300.00)		750
Bonds (at Market Value)		
Company *B*—Pledged to Banks for Loans	$ 7,500	
Company *C*—Pledged with Notes Payable—Trade Creditors	5,500	
Company *A*—On Hand	3,000	16,000
Deficit		29,000
		$90,950
Accounts Payable		$35,550
Notes Payable.		
Banks	$ 6,000	
Trade Creditors	24,000	30,000
Accrued Wages		400
Capital Stock		25,000
		$90,950

Problem 38-2. The books of Holmes and Farr, on April 30, 1934, disclosed the following financial condition:

Assets	
Cash	$ 750 00
Accounts Receivable.	39,500 00
Inventory	26,800 00
Bonds of *X Y* Company	10,000 00
Land and Building	35,000 00
Machinery and Equipment	17,500 00
	$129,550 00

Liabilities and Capital	
Accounts Payable	$ 86,300 00
Notes Payable	
First National Bank	4,000 00
First State Bank	6,000 00
Trade	5,000 00
Accrued Wages	750 00
Holmes—Capital	13,500 00
Farr—Capital	14,000 00
	$129,550 00

The estimated values of the assets were

Cash—at Book Value	
Accounts Receivable	
Good	$20,000 00
Doubtful—Estimated Value, 50%	10,000 00
Bad	9,500 00
Inventory	22,000 00
Bonds of X Y Company—at Book Value	
Land and Building	25,000 00
Machinery and Equipment	12,500 00

Half of the bonds were held by the First National Bank and the other half by the First State Bank, as collateral to the notes payable

Prepare a statement of affairs and a Deficiency account

Problem 38-3. The creditors' committee requests you to prepare statements showing what payments can be made to *each* of the several creditors of B D Perkins on the basis of the following information as of January 19, 1934

Creditors.

Employees—$900 00

Banks holding notes of $17,500 00, secured by investment bonds having a book value of $20,000 00, and an estimated value of $18,500.00

Bixby Corporation, holding notes of $15,000 00 without security, and notes of $7,500 00 secured by warehouse receipts for finished goods of a book value of $6,000 00 and an estimated value of $5,500.00.

Accounts Payable· J C Freeman, $16,500 00; B F. Johnson, $1,500 00, Martin and Walton, $9,500 00

Assets Not Mentioned Above:

Factory Equipment, $15,000 00; estimated value, $10,000 00

Cash, $900 00 (includes worthless check of $300 00)

Stocks of other companies, $15,000 00, estimated value, $9,000 00

Accounts Receivable· Good, $4,000.00, Doubtful (estimated

to net 50%), \$5,000.00, Bad, \$4,000.00.

Goods in process and raw materials—book value, \$7,000.00, estimated value, \$4,950 00

Problem 38-4. From the following data, prepare a statement of affairs to be submitted to a bank in support of an application for an unsecured loan

THE HAWTHORNE COMPANY
Balance Sheet—August 31, 1933

Assets			
Current Assets:			
Cash		\$ 2,135	
Accounts Receivable	\$12,300		
Reserve for Bad Debts	975	11,325	
Notes Receivable	\$ 8,000		
Reserve for Loss	500	7,500	
Accrued Interest on Notes		75	
Inventories			
Finished Goods	\$ 8,300		
Goods in Process	6,120		
Raw Materials	6,170	20,590	\$ 41,625
Investment in Stock of Davis Corporation			12,000
Fixed Assets:			
Land		\$ 8,000	
Buildings	\$40,000		
Reserve for Depreciation	7,500	32,500	
Machinery	\$16,000		
Reserve for Depreciation	4,500	11,500	52,000
Deferred Charges.			
Unexpired Insurance		\$ 400	
Prepaid Interest on Bank Loans		50	450
			\$106,075
Liabilities and Net Worth			
Current Liabilities:			
Accounts Payable		\$ 7,500	
Notes Payable		5,000	
Bank Loans		10,000	
Accrued Interest on Mortgage		275	
Accrued Interest on Notes Payable.		150	
Accrued Taxes		200	\$ 23,125
Mortgage on Land and Buildings			15,000
Net Worth:			
Capital Stock		\$50,000	
Surplus		17,950	67,950
			\$106,075

The reserve for bad debts is regarded as an adequate provision for losses on accounts receivable A non-interest-bearing note for \$750.00 is probably uncollectible, the other notes are good.

Finished goods should sell for $12,000 00 The goods in process will be completed by using materials carried at $800 00 and by making other expenditures of $900.00, as finished goods, they should sell for $9,500 00. The raw materials are conservatively valued in the balance sheet.

The Davis Corporation stock has a market value of $11,500 00, it has been deposited as collateral to the bank loans

The land and buildings were appraised on June 30, 1933, at a value of $27,500 00. The machinery is estimated to be worth $9,000.00 at forced sale.

Non-interest-bearing notes of a face value of $6,000 00, regarded as collectible, have been pledged as collateral to the notes payable

Prepare the asset side of the statement of affairs in two forms:

(1) Classify the assets in accordance with the balance sheet classifications

(2) Classify the assets according to their status as pledged or free.

Problem 38-5. The creditors of the Western Specialties Company are distressed by the decrease in the company's cash and its net worth, as disclosed by the following comparative balance sheet, and ask you to prepare a statement accounting for the change in the company's financial condition.

	December 31	
	1934	1933
Assets		
Cash	$ 750	$ 16,000
Accounts Receivable	66,000	48,000
Notes Receivable	15,000	20,000
Finished Goods	5,000	28,000
Goods in Process	20,000	6,000
Raw Materials	15,000	38,000
Land and Buildings—Plant	75,000	75,000
Machinery and Equipment	105,000	85,000
Investment Real Estate	75,000	75,000
Goodwill	25,000	25,000
	$401,750	$416,000
Liabilities, Reserves, and Net Worth		
Accounts Payable	$ 85,000	$ 10,000
Purchase Money Notes—Balance of $20,000 00 of Notes Issued in Acquisition of Machinery, Payable $2,500 00 Monthly	15,000	
Accrued Wages	500	400
Accrued Taxes	2,500	2,000
Notes Receivable Discounted	10,000	
Mortgage on Plant Real Estate	10,000	10,000

Note Payable—Secured by Mortgage on Investment Real Estate Carried at $30,000,00, due in Five Years	15,000	
Note Payable—Secured by Mortgage on Investment Real Estate Carried at $15,000 00, due in Five Years	10,000	
Reserve for Bad Debts	8,000	3,000
Reserve for Depreciation—Plant Buildings	15,000	12,000
Reserve for Depreciation—Machinery and Equipment	35,000	27,500
Capital Stock	200,000	300,000
Surplus	4,250*	51,100
	$401,750	$416,000

* Deficit

The decrease in the capital stock was the result of a donation by each stockholder of one third of his holdings

Prepare the desired statement.

After studying the statement prepared by you, the creditors engage you to make an investigation of the company's affairs and to submit a statement which will reflect the position of the several creditors. You discover the following facts

The accounts receivable will probably not realize more than 50% of their face value

The finished goods can be sold for their stated cost The goods in process represent a special order (selling price, $35,000.00) the completion of which will require the use of raw materials carried at $5,000 00 and other expenditures of $8,000 00. Raw materials not required for this work will probably realize not more than half of their book value.

The notes receivable on hand are expected to realize $3,000 00; of those discounted, it is expected that one note for $4,000 00 will be dishonored by the maker.

The land and buildings occupied for plant purposes can be sold for $50,000 00. The company which sold the machinery in 1934 will repossess it in settlement of the unpaid balance of the purchase money notes; the remainder of the machinery and equipment will probably bring not more than $35,000.00.

The investment real estate is worth about 60% of its book value.

QUESTIONS AND PROBLEMS ON CHAPTER 39

QUESTIONS

Question 39-1. What factor will determine whether an assignee, a receiver, or a trustee will open new books or record his transactions on the old books?

Question 39-2. An assignee has been appointed for an insolvent manufacturing corporation whose liabilities and assets consist of its capital stock, notes and accounts payable, unpaid wages, cash, notes and accounts receivable, raw materials, supplies, finished goods, stock in process, plant, and balances against branches The assignee is temporarily to handle the property as a going concern. You are placed in charge of his accounts What are the first steps you would take relative to (a) the liabilities, (b) the assets?

Question 39-3. State the entries to be made by the receiver in equity in opening a new set of books, and state what entries should be made on the old books

What assets does the receiver take onto his books?

Question 39-4. When a receiver in equity takes charge of a business, why is it advisable for him to leave the liabilities on the old books and not to take them onto the new books opened by him?

PROBLEMS

Problem 39-1. The Jackson Company, finding its credit impaired, prepares the following statement, as of January 1, 1933:

Assets		Liabilities and Net Worth	
Cash	$ 2,107 00	Accounts Payable	$480,201 00
Accounts Receivable	184,216 00	Capital Stock	100,000 00
Inventory	345,756 00	Surplus.	200,485 00
Fixed Assets—Net	248,607 00		
	$780,686 00		$780,686 00

The corporation applied for a receiver, A L Sands was appointed and granted permission to operate

The receiver took over the assets as shown in the above statement, first requiring that the merchandise be written down to $290,110 00, and the accounts receivable to $152,600.00.

On May 31, 1934, the receiver had collected all of the accounts receivable taken over, with a further loss of $12,170.00, had made sales on account of $350,100 00, and had collected for all of these sales with the exception of $48,100.00 still carried as accounts receivable He had paid old accounts payable of $350,510.00, and receiver's expenses of $75,415.00 He returned the business to the stockholders on this date, after charging $18,300.00 as depreciation. There was an inventory of $41,180 00

Prepare all entries which should appear on the company's books and on the receiver's books, and submit a balance sheet of the company after the business was returned to the stockholders.

Problem 39-2. On April 15, 1934, Manders Company made a general assignment to A Lurie, without preference, for the benefit of creditors The assignee was to continue operations if he considered it advisable, and he therefore opened a new set of books The assignor's balance sheet on April 15 was:

Assets		Liabilities	
Cash	$ 1,100	Accounts Payable	$25,300
Notes Receivable	4,000	First Mortgage Bonds (6% —June 30, Dec 31)	10,000
Accounts Receivable (including $4,000 00 due from the president)	12,500	Capital Stock	10,000
Inventories	9,300	Surplus	1,600
Plant	20,000		
	$46,900		$46,900

By May 1, the assignee had determined that the president's account was uncollectible, that the assets were not worth their book values, and that continued operations and a reorganization were impracticable. He therefore decided to liquidate.

May 7—The inventories were sold for $5,500.00.
May 21—The accounts receivable were sold for $6,500 00.
May 31—A 30% dividend was paid.
June 10—Notes receivable for $3,500 00 were collected, and one note for $500.00 was settled for $50 00
June 30—The plant was sold for $13,000.00 to the bondholders
July 5—The assignee paid his fee and expenses, amounting to $2,400.00, and made a final dividend to the creditors.

Make journal entries in parallel columns, showing the record on the company's books and on the assignee's books. Continue the journal entries until both sets of books are closed.

Problem 39-3. The Cream Company, manufacturers, unable to meet their obligations, suspended payment on January 1, 1933,

and George Sauer was appointed receiver. The books showed the following assets and liabilities:

Assets		Liabilities	
Cash	$ 800	Accounts Payable	$120,285
Notes Receivable	35,000	Notes Payable	115,000
Accounts Receivable	125,000	Interest on Notes Payable	2,800
Finished Goods	10,000	Accrued Taxes (Estimate)	900
Goods in Process	40,000	Mortgage on Land & Bldgs	100,000
Raw Materials	25,000	Interest on Mortgage	4,250
Land and Buildings	145,000	Reserve for Depreciation	10,500
Machinery and Tools	70,000	Capital Stock	100,000
Furniture and Fixtures	10,000	Surplus.	7,065
	$460,800		$460 800

The transactions for the first year of the receivership may be summarized as follows

Collections on Old Accounts Receivable:		
Total Accounts		$125,000 00
Less Discounts	$ 500 00	
Bad Debts	14,000 00	14,500 00
Cash Received		$110,500 00
Collections on Old Notes Receivable		$ 30,000 00
Settlements on Old Notes Payable:		
Total Notes		$115,000 00
Notes Renewed by Company		90,000 00
Notes Paid by Receiver		$ 25,000 00
Total Interest Paid on Notes		$ 4,100 00
Settlements of Old Accounts Payable		
Total Old Accounts		$120,285 00
Notes Given by Company		65,000 00
Balance		$ 55,285 00
Accounts Paid by Receiver		40,000 00
Balance Unpaid		$ 15,285 00
Sales on Account		$380,000 00
Cash Sales		18,150 00
Collections on New Accounts Receivable.		
Total Accounts		$380,000 00
Less. Discounts	$ 800 00	
Bad Debts	2,000 00	2,800 00
Balance		$377,200 00
Cash Received		212,000 00
Balance		$165,200 00
Notes Received		65,000 00
Balance		$100,200 00

Collections on New Notes Receivable	$ 43,500 00
Cash Purchases of Raw Materials	141,000 00
Other Cash Payments	
Interest on Mortgage for One Year	6,000 00
Taxes	765 00
Labor	115,000 00
Manufacturing Expenses	35,000 00
Selling Expenses	20,000 00
General Expenses	5,000 00

Prepare journal entries as they should appear on the receiver's books and on the company's books, and trial balances of both sets of books

Following are the inventories and adjustments at the end of the year:

Inventories:	
Raw Materials	$25,000 00
Goods in Process	18,000 00
Finished Goods	49,000 00
Accrued taxes, estimated	750 00
Accrued interest on mortgage	4,250 00
Accrued interest on notes payable	950 00
Depreciation	
Buildings	3,000 00
Machinery and Tools	5,000 00
Furniture and Fixtures	500 00

Prepare working papers preparatory to closing the books, statement of cost of goods manufactured and sold; profit and loss statement; and balance sheet.

Problem 39-4. The Gage Company was unable to meet the interest on its bonds due June 30, 1934, and was placed in the hands of Burt Horner, as receiver, by order of the court Horner took over the assets on the date of the following balance sheet:

Balance Sheet—June 30, 1934

Cash	$ 350	Capital Stock	$ 50,000
Accounts Receivable	58,475	First Mortgage 6% Bonds	80,000
Finished Goods	20,875	Accrued Bond Interest	2,400
Goods in Process	4,050	Notes Payable	45,000
Raw Materials	29,500	Accounts Payable	47,650
Land	30,700	Reserve for Depreciation:	
Buildings	95,000	Buildings	19,500
Machinery	40,000	Machinery	20,000
		Res for Doubtful Accts	6,200
		Surplus	8,200
	$278,950		$278,950

The receiver operated the business for six months; his transac-

tions were as follows.

Purchases of Raw Materials	$ 80,000 00
Payments on Account of Above—Cash	68,500 00
Discounts Taken on Above	850 00
Expense Payments:	
Direct Labor	35,100 00
Indirect Labor	5,950 00
Factory Expenses	8,215 00
Selling Expenses	15,250 00
General Expenses	2,150 00
Sales on Account	185,000 00
Collections on Above Sales (Including Discounts of $2,800 00).	148,000 00
Collections on Old Accounts Receivable	41,500 00
Payments on Old Accounts Payable—50%	

Paid bond interest to December 31, 1934, and interest accrued to December 31 on notes payable, at 6%

The books were closed on December 31; depreciation was provided as follows: 6% per annum on buildings, and 20% per annum on machinery, and the following inventories were set up:

Goods in Process	$1,500 00
Raw Materials	7,600 00
Finished Goods	9,900 00

On January 1, 1935, an offer was received and accepted for the sale of all the assets of the business other than cash, on the following basis:

Land	$35,000 00
Buildings	45,000 00
Machinery	12,000 00
Inventories at 120% of Values Stated Above	
Accounts Receivable.	
Old Accounts	8,000.00
New Accounts	35,000 00

The purchaser assumed the mortgage, and paid the balance in cash

The receiver then paid all liabilities and his own fee of $5,000.00, and turned the remaining cash back to the company, which distributed it to its stockholders, and dissolved

Make journal entries in parallel columns, showing all entries necessary to record the foregoing facts as they would appear on the books of the corporation and on the books of the receiver.

QUESTIONS AND PROBLEMS ON CHAPTER 40

QUESTIONS

Question 40-1. Distinguish between a statement of affairs and a realization and liquidation account; between a deficiency account and a realization profit and loss account.

Question 40-2. The realization and liquidation account with its supporting statements should be prepared by a process of journalizing in the statements. Explain what the offsetting debit and credit entries would be with respect to the following:

(a) Assets, liabilities, and capital at the beginning of the period.
(b) The discovery of additional assets.
(c) The sale of merchandise
(d) The collection of accounts receivable at a loss.
(e) The collection of interest on notes
(f) The payment of expenses.
(g) The payment of liabilities.

Question 40-3. John Smith made a composition with his creditors by which it was agreed that all accounts and notes would be settled by payments of sixty cents on the dollar. He owed $15,000.00 of notes and $10,000 00 of accounts. A trustee was put in charge, and new notes were given for the reduced amounts agreed upon Payments of forty cents on the dollar had been made by the time the trustee presented a realization and liquidation account to the creditors. Show how these facts would be set out in the realization and liquidation account

Question 40-4. In preparing a realization and liquidation account, how would you show.

(a) Depreciation reserve at the beginning of the period, depreciation charge for the period, and depreciation reserve at the end of the period?
(b) Discounts allowed to customers?

PROBLEMS

Problem 40-1. The balance sheet of Sanford, Incorporated, on

July 31, 1933, appears below:

Assets

Current Assets			
Cash		$ 270 00	
Accounts Receivable	$33,290 00		
Reserve for Bad Debts	1,800 00	31,490 00	
Notes Receivable		10,000 00	
Inventories			
Finished Goods	$11,315 00		
Goods in Process	7,125 00		
Raw Materials	4,125 00	22,565 00	$ 64,325 00
Fixed Assets			
Land and Buildings			
Land		$ 16,500 00	
Buildings	$58,000 00		
Reserve for Depreciation	19,500 00	38,500 00	
Machinery and Equipment	$58,000 00		
Reserve for Depreciation	18,300 00	39,700 00	
Office Furniture—Less Depreciation		4,960 00	99,660 00
Deferred Charges			
Prepaid Advertising		$ 395 00	
Unexpired Insurance		720 00	1,115 00
			$165,100 00

Liabilities and Net Worth

Current Liabilities		
Accounts Payable	$ 46,875 00	
Notes Payable	25,000 00	
Accrued Interest on Notes Payable	250 00	
Accrued Interest on Bonds	2,400 00	$ 74,525 00
Fixed Liabilities		
First Mortgage, 6%, Bonds, Secured by Land and Buildings	...	40,000 00
Net Worth:		
Capital Stock	$100,000 00	
Less Deficit	49,425 00	50,575 00
		$165,100 00

The mortgage interest had not been paid for a year; the current position was poor; and losses had been sustained for some time. It was therefore decided to liquidate. Liquidation required five months, during which period the following transactions took place:

The accounts receivable realized $29,800 00

The notes receivable were collected with $75 00 of interest

The finished goods were sold for $13,625.00, the goods in process, for $4,950 00; and the raw materials, for $3,650 00.

The land and buildings were sold for $50,000 00; and the machinery and equipment, for $32,000.00. The office furniture was taken by a creditor in settlement of an account of $3,500 00.

A refund of $280.00 was received on cancellation of the insurance.

All liabilities were settled in full, together with $125 00 of interest

on notes payable and $400 00 of interest on bonds, accrued after July 31, 1933.

Expenses of liquidation amounted to $910.00.

The cash balance on December 31, 1933, was distributed to the stockholders in final liquidation of the company

Prepare a realization and liquidation account, a cash account, and a profit and loss statement.

Problem 40-2. The Chandler Corporation drew the following balance sheet from its books on September 30, 1933

Assets		Liabilities		
Cash	$ 150	Mortgage on Land & Bldg		$12,000
Accounts Receivable	3,130	Interest on Mortgage		180
Work in Process	24,320	Notes Payable		8,500
Raw Materials	9,625	Accounts Payable		39,750
Bonds of Other Companies	9,600	Salaries and Wages		2,135
Land and Building	19,600	Taxes		115
Machinery and Equipment	17,600	Net Worth.		
		Capital Stock	$50,000	
		Less Deficit	28,655	21,345
	$84,025			$84,025

A program of liquidation was decided upon

During the year ending September 30, 1934, the collections from accounts receivable totaled $2,500 00; the remaining accounts, with the exception of balances totaling $350 00, were written off.

Materials valued at $6,525.00 were used in completing work in process, and payments for labor, in the amount of $8,300.00, were made for the same purpose The work in process, when completed, was disposed of for $38,000 00

Raw material was sold for $2,950 00.

Interest amounting to $75 00 was collected on the bonds owned, and the bonds were sold for $9,850.00.

The land and building were sold to the holder of the mortgage for $18,000 00. Additional bond interest amounting to $90.00 had accrued at the date of the settlement. The company received in cash the excess of the sale price over the principal and interest of the mortgage

Machinery and equipment carried at $10,000 00 were sold for $9,000.00.

All liabilities on September 30, 1933, were settled in full, except notes payable totaling $3,500 00 and accounts payable totaling $9,500.00, the total payment for taxes, including the accrual on September 30, 1933, and the subsequent accrual, was $230 00

Expenses of liquidation were $3,115 00.

Prepare a realization and liquidation account, profit and loss statement, and cash account for the year, and a balance sheet as of

September 30, 1934

Problem 40-3. The stockholders of The Bentley Corporation voted to dissolve the corporation, and authorized the directors to proceed upon a program of realization and liquidation. The balance sheet of the company on December 31, 1933, appeared as follows:

Assets			
Current Assets			
Cash		$ 500 00	
Accounts Receivable	$ 48,000.00		
Reserve for Bad Debts	1,900 00	46,100 00	
Inventories		60,000 00	$106,600 00
Bond Sinking Fund			82,000 00
Fixed Assets:			
Land		$ 20,000 00	
Building	$175,000 00		
Reserve for Depreciation	8,000 00	167,000 00	
Machinery and Equipment	$ 60,000 00		
Reserve for Depreciation	18,000 00	42,000 00	229,000 00
Goodwill			100,000 00
Deferred Charges:			
Miscellaneous		$ 2,500 00	
Unamortized Bond Discount		2,000 00	4,500 00
			$522 100 00
Liabilities and Net Worth			
Current Liabilities:			
Accounts Payable		$ 98,400 00	
Dividends Payable		3,000 00	
Bond Interest		1,750 00	$103,150 00
Fixed Liabilities:			
First Mortgage Bonds			100,000 00
Deferred Credits:			
Rentals Collected in Advance			350 00
Net Worth			
Capital Stock:			
Preferred		$100,000 00	
Common		100,000 00	
Reserve for Contingencies		10,000 00	
Sinking Fund Reserve		82,000 00	
Surplus		26,600 00	318,600 00
			$522,100.00

By March 31, 1934, the assets had been realized and the liabilities liquidated as follows:

Accounts receivable had realized 80% of their face value

All accounts payable and dividends payable on December 31, 1933, had been paid

The merchandise had been disposed of for $43,500 00

The machinery and equipment had been sold for $32,000.00.

The sinking fund trustee had been paid sufficient additional cash to buy in all of the outstanding bonds at 98½, plus interest accrued to December 31, 1933 Any additional accrual is to be disregarded The bonds were accordingly redeemed at 98½ Any loss on realization of sinking fund assets is to be ignored.

The bond liability having been liquidated, the land and building were sold for $180,000 00. The purchaser would not take the property subject to the lease held by a tenant who occupied the top floor, and whose prepaid rental was reflected in the balance sheet on December 31, 1933. In order to consummate the sale of the plant, it was necessary to effect a cancellation of the lease, which was accomplished by paying the tenant $3,500.00 and refunding to him the advance payment mentioned

Miscellaneous expenses of realization and liquidation were $4,000 00.

The preferred stock certificates contained a provision that preferred stock was to receive semiannual dividends at the rate of 6% per annum, payable January 1 and July 1, the dividends to be cumulative if not paid On dissolution, the preferred stock was to be retired at 110, plus dividends accrued from the date of the last declaration (December 31, 1933) to the date set by the directors in the notice to stockholders to surrender their preferred stock for cancellation The holders of the common stock were to receive, on dissolution, all of the remaining net assets.

On March 31, 1934, the directors notified all stockholders to turn in their stock certificates for cancellation as of April 30, 1934. On the latter date, all certificates having been received from the stockholders, the cash on hand was distributed to the stockholders, and the stock certificates were cancelled

From the foregoing facts, prepare a realization and liquidation account, a realization profit and loss account, a cash account, and a statement of capital.

Problem 40-4. Following is the balance sheet of a partnership which was put in a receiver's hands on May 1, 1933:

Balance Sheet—April 30, 1933

Cash		$ 200	Accounts Payable	$ 42,700
Accts Receivable		30,000	Notes Pay (Secured by Co *A* Bonds).	15,000
Merchandise		23,000	Taxes Unpaid . .	500
Bonds of Co *A*		10,000	Acc Int on Mortgage	300
Unexpired Insurance		300	Mortg on Land and Bldgs .	40,000
Land		8,000	A B Brown, Capital	10,000
Buildings	$58,000		C D Davis, Capital . .	10,000
Res for Dep'n	6,000	52,000	E F Ferguson, Capital	5,000
		$123,500		$123,500

Estimated Values.	
Land	$ 7,500 00
Buildings	38,000 00
Bonds of Company *A*	8,500 00
Merchandise	16,000 00
Accounts Receivable	
$12,000 00 Good	12,000 00
15,000 00 Doubtful	9,000 00
3,000 00 Bad	0 00
Unexpired Insurance (estimated value to be shown in the statement of affairs)	75 00

Prepare a statement of affairs and a deficiency account.
The liquidator completed his work on July 31
The land and buildings sold for $55,000 00.
The bonds of Company *A* brought·

Par	$8,800 00
Accrued interest	100 00
Total	$8,900 00

The merchandise sold for $18,000.00

The accounts receivable realized $22,000.00.

The insurance policies were canceled, and $60.00 of returned premiums were received

The liquidator paid all of the liabilities shown in the balance sheet, as well as $75.00 interest accrued on the notes payable, and $100 00 accrued on the mortgage after April 30

The liquidator paid expenses of $200.00.

Prepare a realization and liquidation account, a realization profit and loss account, a cash account, and a balance sheet.

How should the cash on hand be divided; that is, what payments should be made to the partners? Assume that payments are made as recommended; prepare a statement of the partners' accounts.

Problem 40-5. The following is the trial balance of the Pittsfield Company on July 31, 1934:

Cash	$ 11,320	Accounts Payable	$ 22,000
Accounts Receivable	23,400	Interest Accrued on Mortgage	312
Inventories	10,350	Mortgage on Real Estate, 6%	26,000
Land and Buildings	55,000	Reserves for Depreciation:	
Machinery	35,000	Buildings	5,000
Furniture and Fixtures	9,700	Machinery	8,000
Tools	5,000	Furniture and Fixtures	5,100
		Capital Stock	60,000
		Surplus	23,358
	$149,770		$149,770

A stockholders' meeting was held on July 31, 1934, and dissolu-

tion was approved. The land and buildings were sold to the mortgagee for \$35,000 00 as of August 15, 1934. On October 1, 1934, the cash book showed

Debits Land and buildings, \$8,623 00, machinery, \$24,500 00; tools, \$2,100 00; furniture and fixtures, \$3,700 00; accounts receivable, \$21,000 00, inventories, \$8,000 00.
Credits Accounts payable, \$22,000 00; expenses, \$1,600 00

Prepare a realization and liquidation account, a cash account, a realization profit and loss statement, and a balance sheet before the distribution of cash to the stockholders.

PROBLEMS ON CHAPTER 41

Problem 41-1. Refer to problem 40-1, and prepare a statement of realization, liquidation, and operations

Problem 41-2. Refer to problem 40-2, and prepare a statement of realization, liquidation, and operations

Problem 41-3. Refer to problem 40-3, and prepare a statement of realization, liquidation, and operations.

Problem 41-4. Refer to problem 40-4, and prepare a statement of realization, liquidation, and operations

Problem 41-5. Refer to problem 40-5, and prepare a statement of realization, liquidation, and operations

QUESTIONS AND PROBLEMS ON CHAPTER 42

QUESTIONS

Question 42-1. State what entry is made by the home office in taking up the profit of a branch, and explain the theory underlying this entry State, and explain the reason for, the entry taking up a branch loss.

Question 42-2. A firm having several branches maintains an account in its ledger with each branch, and charges to such accounts all goods sent to the branches for stock. At the end of the year the balance of each branch account is treated as an ordinary account receivable, and is included in the balance sheet with the general debts owing to the firm If you see any objection to this method, state it, and state also how you would deal with the accounts.

Question 42-3. Outline the instructions you would give to afford the main office of a company adequate control over expenditures at its various plants for additions and replacement repairs, and to insure uniform and correct accounting treatment thereof

Question 42-4. A company having several branches desires to charge each branch with interest on the average capital invested in the branch State how these entries will be made on the home office books. What effect will such entries have on the branch profits, and on the profits of the concern as a whole?

Question 42-5. A trading and mining company maintains five general stores at five separate stations, and concentrates its supplies each year at Station *A*, which is the only station accessible by railway, distribution is made from this station by means of wagon and pack trains. The cost of goods laid down at Station *A* is 10% above the invoice prices at the company's general office in Montana, and the agent at Station *A* is instructed to rebill all shipments to Station *B* at 20%, to Station *C* at 35%, to Station *D* at 40%, and to Station *E* at 50% above original invoice cost, since the experience of several years bears out the general manager's statement that such additions are approximately correct and cover actual cost of transportation.

In auditing the accounts for the purpose of certifying the annual

balance sheet, you ascertain that certain goods of Station D, amounting to \$10,000 00, are inventoried by the agent at that point at 70% above the original invoices, which you have examined at the home office. He states that Station E, being overstocked, shipped him several lots of merchandise at the price billed out to E by Station A, plus 10% for estimated cost of handling and repacking at E; and to this amount, D legitimately added 10% for cost of transportation from E back to D.

In your visits to other stations you find many similar instances in which goods have been moved back and forth, and each time the shipping station has added 10% for handling and repacking

Of a total inventory at all stations of goods originally costing \$200,000 00, the summary shows final extensions of values aggregating \$325,000 00, of which not more than \$75,000 00 is covered by the cost of direct transportation, leaving approximately \$50,000 00 represented by internal charges added between the different stations

Review the foregoing statement, and give your method of handling such accounts.

PROBLEMS

Problem 42-1. The Mercedes Company, of New York City, operates branches at Pittsburgh, Omaha, and Denver. The branches keep their own accounts receivable and remit all collections to the main office at New York. All branch expenses, including salaries and wages, are paid by the branches from working funds that are kept at a fixed balance by draft on the main office.

The following information applicable to the year ended December 31, 1933, is supplied by the branches:

	Pittsburgh	Omaha	Denver
Sales (on account)	\$187,000	\$171,000	\$163,000
Returned sales	2,500	1,400	
Expenses paid.	38,500	36,950	36,750
Bad debts		1,250	600
Cash collected from customers	168,500	162,600	153,500
Accounts receivable—December 31, 1932	95,000	85,500	70,000
Accounts receivable—December 31, 1933	111,000	91,250	78 900
Working fund	2,500	2,500	2,500
Inventory—December 31, 1932	35,000	39,000	36,500
Inventory—December 31, 1933	43,000	47,000	45,000
Goods received from main office	135,000	118,000	123,500

From these details, prepare:

(a) A statement of branch assets on December 31, 1932, and balances of current accounts.

(b) The closing entries for the Pittsburgh branch.

(c) The main office current account on the Pittsburgh books.
(d) The journal entry on the main office books, taking up the Pittsburgh branch profit, and the Pittsburgh Branch Current account on the main office books
(e) A combined branch profit and loss statement.
(f) A statement of branch current accounts on the main office books; and lists of assets represented by balances on December 31, 1933

Problem 42-2. The following statements were rendered by the Lansing branch to the home office at Milwaukee:

Comparative Balance Sheet

	December 31	
	1932	1933
Assets		
Cash Working Fund	$ 1,000	$ 1,500
Accounts Receivable	31,940	31,315
Merchandise	76,375	86,600
Furniture and Fixtures	5,000	5,500
Deferred Charges	200	250
	$114,515	$125,165
Liabilities		
Accrued Salaries	$ 300	$ 250
Reserve for Doubtful Accounts	850	1,025
Reserve for Depreciation	1,500	2,100
Home Office Current	111,865	121,790
	$114,515	$125,165

Profit and Loss Statement
Year Ended December 31, 1933

Sales		$271,170
Deduct.		
Returned Sales and Allowances	$ 1,045	
Freight Out Paid	860	1,905
Net Sales		$269,265
Deduct Cost of Goods Sold		
Inventory, January 1, 1933	$ 76,375	
Merchandise from Home Office	231,270	
Total	$307,645	
Less Inventory, December 31, 1933	86,600	221,045
Gross Profit on Sales		$ 48,220
Deduct		
Salaries	$ 15,325	
Depreciation of Buildings	3,750	
Depreciation of Furniture and Fixtures	600	
Provision for Bad Debts	525	
Interest Charged by Home Office	4,500	
Other Expenses	1,800	
Home Office Overhead Charged to Branch	5,000	31,500
Net Profit		$ 16,720

Merchandise is billed to the branch at cost. All cash received from customers is remitted to the home office Fixed assets, other than furniture and fixtures, are carried on the home office books at a value of \$75,000 00 and depreciated at the rate of 5% per annum Additions to furniture and fixtures are purchased and paid for by the home office Expenses are paid by the branch from the working fund, which is replenished by draft on the home office

Prepare: (1) an analysis of the Home Office Current account for the year, which should accompany the foregoing statements; and (2) all entries (in journal form) on the home office books for the establishment of a reciprocal Branch Current account.

Problem 42-3. On January 1, 1932, the Perfection Manufacturing Company established a branch at Springfield, Missouri, under the management of J G. Whitely Merchandise was billed to Whitely at 130% of cost, one sixth of the amount thus added to cost representing shipping expenses to the branch Whitely remitted to the home office all proceeds of sales and collections of accounts receivable; he paid expenses from a working fund of \$500.00, which was replenished regularly from the home office. The home office sent him a check for \$250.00 each month as an advance, it being understood that at the end of the year he should be allowed 30% of the net profit as shown by the branch books (without regarding these monthly advances as an expense), and that any difference between the manager's share of profit and his advances should be payable by or to the company

On December 31, 1932, Whitely submitted the following statements to the home office

Branch Profit and Loss Statement, 1932

Sales		\$165,000 00
Less Cost of Goods Sold		
Merchandise Received	\$182,000 00	
Less Inventory, December 31, 1932	44,200 00	137,800 00
Gross Profit		\$ 27,200 00
Expenses		18,000 00
Net Profit		\$ 9,200 00

Branch Assets

Cash	\$ 500 00
Accounts Receivable	12,000 00
Merchandise	44,200 00
Total	\$ 56,700 00

The home office statements for the year appear on the following page.

THE PERFECTION MANUFACTURING COMPANY
Profit and Loss Statement
Year Ended December 31, 1932

Sales:		
To J G Whitely	$182,000 00	
To Other Customers	635,000 00	
Total		$817,000 00
Less Cost of Goods Sold.		
Inventory, January 1, 1932	$105,000 00	
Cost of Goods Manufactured	678,000 00	
Total	$783,000 00	
Less Inventory, December 31, 1932	110,000 00	673,000 00
Gross Profit on Sales		$144,000 00
Expenses		48,000 00
Net Profit		$ 96,000 00

THE PERFECTION MANUFACTURING COMPANY
Balance Sheet—December 31, 1932

Assets		Liabilities	
Cash	$ 15,650	Accounts Payable	$ 40,000
Accounts Receivable.		Capital Stock	400,000
J. G Whitely	50,500	Surplus	83,150
Other Customers	35,000		
Inventories	110,000		
Plant—Depreciated Value	312,000		
	$523,150		$523,150

Give journal entries to adjust the company's books to a proper basis. (The books have been closed.) Prepare an adjusted profit and loss statement with columns for home office, branch, and combined, and a balance sheet.

Problem 42-4. The following is a trial balance of December 31, 1933, taken from the books of The Black and White Company:

Imprest Fund	$ 1,000 00	
Union Trust Company	18,500 00	
First National Bank	10,500 00	
Accounts Receivable	50,000 00	
Notes Receivable	13,000 00	
Merchandise Inventory, January 1, 1933	200,000 00	
Branch Controlling Account	60,000 00	
Reserve to Reduce Branch Inventory, Dec 31, 1932, to Cost		$ 5,000 00
Investments in Bonds	25,000 00	
Prepaid Insurance	2,000 00	
Land	25,000 00	
Buildings	125,000 00	
Machinery and Equipment	100,000 00	
Furniture and Fixtures	5,000 00	

Depreciation Reserve		$ 11,750 00
Accounts Payable		62,500 00
Notes Payable		200,000 00
Accrued Taxes		1,500 00
Accrued Interest		1,250 00
Chas Adams		16,000 00
William Black		18,000 00
Thomas Clark		20,000 00
George Dunn		14,000 00
C H Evans		22,000 00
Common Stock		200,000 00
Surplus		25,500 00
Sales		299,500 00
Returned Sales	$ 7,500 00	
Purchases	150,000 00	
Pay Roll	35,000 00	
Manufacturing Expense	25,000 00	
Taxes Paid	2,500 00	
Salaries	20,000 00	
Office Expense	4,500 00	
Discount Allowed	1,500 00	
Discount Earned		1,500 00
Interest Expense	7,500 00	
Interest Earned		500 00
Branch Profit—1933		9,500 00
Dividends Paid	20,000 00	
	$908,500 00	$908,500 00

Home office inventory, December 31, 1933, $191,000 00

The following transactions occurred on December 31, 1933, but had not been entered on the company's records:

(1) The company was granted an increase in its capital as follows:

$200,000 00—7% cumulative preferred stock, par value $100 00 per share.
$100,000 00—additional issue of common stock, par value $100 00 per share

(2) The board of directors authorized the sale of all of the preferred stock at $95.00 per share, using the proceeds received on December 31 to reduce the company's notes payable and directing that the discount of $5.00 per share be charged to Surplus. It also authorized the sale of the unissued common stock pro rata to the stockholders of record at $100.00 per share.

The common stock holdings before the above transactions were made, were as follows:

Chas Adams	310 shares
William Black	408 shares
Thomas Clark	492 shares
George Dunn	290 shares
C H Evans	500 shares

(3) The common stock holders requested that their personal accounts be charged with the cost of the common stock purchased by them.

Shipments have been billed to the branch during the past several years at a uniform rate of write-up on cost. The branch manager rendered the following statements as of December 31, 1933:

Balance Sheet—December 31, 1933

Assets	
Cash	$ 8,500 00
Accounts Receivable	18,500 00
Notes Receivable	4,000 00
Merchandise Inventory	30,000 00
Prepaid Insurance	500 00
	$61,500 00
Liabilities and Net Worth	
Accounts Payable	$ 1,250 00
Accrued Taxes	250 00
Home Office	60,000 00
	$61,500 00

Profit and Loss Statement
Year Ended December 31, 1933

Sales		$119,500 00
Deduct:		
Inventory, December 31, 1932	$ 25,000 00	
Merchandise from Home Office	100,000 00	
Total	$125,000 00	
Less Inventory, December 31, 1933	30,000 00	95,000 00
Gross Profit		$ 24,500 00
Deduct Expenses		15,000 00
Net Profit		$ 9,500 00

Depreciation should be provided as follows. 2% on buildings, 5% on machinery and equipment, and 7½% on furniture and fixtures. A reserve of $1,000 00 is also to be provided for bad and doubtful notes and accounts receivable.

Prepare journal entries covering the foregoing transactions, a profit and loss statement, and a surplus statement for the year 1933, and a balance sheet as of December 31, 1933, after the consummation of all transactions referred to. The profit and loss statement may show the branch profit as a single item. The balance sheet should combine the home office and branch balance sheets.

Problem 42-5. The following is a trial balance of The Gaudel Manufacturing Company on December 31, 1933, at the close of its first year's operations:

Cash	$ 40,000	
Accounts Receivable	51,000	
Branch Current	143,000	
Machinery and Equipment	400,000	
Reserve for Depreciation		$ 25,000
Accounts Payable		83,000
Notes Payable		150,000
Capital Stock		700,000
Sales (to customers and branch, 80,000 units at $10 00)		800,000
Raw Materials Purchased	600,000	
Productive Labor	200,000	
Non-Productive Labor	50,000	
Manufacturing Supplies and Expenses	100,000	
Selling Expense	80,000	
Administrative Expense	80,000	
Interest Paid	8,000	
Discounts Earned		6,000
Discounts Allowed	12,000	
	$1,764,000	$1,764,000

The inventories on December 31, 1933, determined from accurate records of material and labor, with overhead applied at an estimated direct-labor-cost rate, were as follows:

	Material	Productive Labor	Overhead	Total
Raw Materials	$125,000			$125,000
Work in Process	30,000	$40,000	$36,000	106,000
Finished Goods (20,000 units)	60,000	50,000	45,000	155,000

The raw materials on hand have a market value of only $100,000 00. The estimated labor and factory expenses used in computing the rate of overhead were as follows:

Productive labor.	$200,000 00
Non-productive labor.	$ 60,000 00
Supplies and expenses	96,000 00
Interest on machinery and equipment	24,000 00
Total	$180,000 00

The branch office reports the following ledger balances on December 31:

Cash	$ 3,000	
Accounts Receivable	40,000	
Purchases from Home Office. 60,000 units @ $10 00	600,000	
Sales 50,000 units		$500,000
Home Office Current Account		143,000
	$643,000	$643,000

Ten thousand units were on hand at the branch office on Decem-

ber 31, 1933. The unit costs of material and labor in the branch inventory were the same as those in the home office inventory.

Prepare a statement of cost of goods manufactured and sold, a profit and loss statement, journal entries to close the home office books, working papers combining the home office and branch balance sheets, and a balance sheet.

QUESTIONS AND PROBLEMS ON CHAPTER 43

QUESTIONS

Question 43-1. What is the purpose of a consolidated balance sheet? How does a consolidated balance sheet differ from a balance sheet prepared from the parent company's books?

Question 43-2. Why is a consolidated balance sheet superior to a balance sheet of the parent company showing the Investment account?

Question 43-3. If the parent company pays more than book value for the subsidiary stock, how is the excess shown on the consolidated balance sheet? Justify this treatment.

Question 43-4. State the amount of the goodwill and of the minority interest in the following case and explain how you obtained your figures The subsidiary has a capital stock of $100,000 00 and a surplus of $50,000.00 The parent company acquired 90% of the stock and paid $140,000 00 for it A consolidated balance sheet is to be made at the date of acquisition.

Question 43-5. Assume that the subsidiary had a surplus at the date of acquisition of its stock by the parent company, and that the parent company bought all of the stock, paying exactly book value for it. What eliminations would be made in preparing a consolidated balance sheet at the date of acquisition?

Question 43-6. Assume that the subsidiary had a deficit at the date of acquisition, and that the parent company bought all of the stock, paying par less the deficit What accounts should be eliminated in making a consolidated balance sheet at the date of acquisition?

Question 43-7. Assume that the parent company acquired 98% of the stock of the subsidiary, and that a balance sheet is to be made at the date of acquisition. Assume also that the parent company paid exactly book value for its holding, as shown by the books of the subsidiary. State how the elimination should be made and how the minority interest should be determined in each of the following cases:

(a) The subsidiary had no surplus
(b) The subsidiary had a surplus
(c) The subsidiary had a deficit

PROBLEMS

Problem 43-1. On January 1, 1934, Company *P* acquired for \$150,000 00 the entire capital stock of Company *S*, consisting of 1,000 shares of \$100 00 par value each. After the transaction had been recorded on the books of Company *P*, the trial balances of the two companies were as follows:

	Company *P*		Company *S*	
Land	\$ 50,000		\$ 25,000	
Buildings	100,000		45,000	
Investment in Company *S*	150,000			
Inventories	80,000		20,000	
Accounts Receivable	70,000		85,000	
Accounts Payable		\$100,000		\$ 50,000
Capital Stock		250,000		100,000
Surplus		100,000		25,000
	\$450,000	\$450,000	\$175,000	\$175,000

Prepare a consolidated balance sheet

Problem 43-2. On June 30, 1934, the Monroe Company purchased 85% of the stock of the Dearborn Company Trial balances of the two companies immediately after the purchase were as follows:

Debits	Monroe Company	Dearborn Company
Cash	\$ 8,500 80	\$ 11,305 50
Accounts Receivable	45,600 15	51,159 90
Notes Receivable	5,600 00	4,131 25
Inventories	61,506 05	31,510 40
Investment in Dearborn Company	93,500 00	—
Machinery and Equipment	49,105 00	33,135 50
Goodwill	20,000 00	15,000 00
	\$283,812 00	\$146,242 55
Credits		
Accounts Payable	\$ 47,160 10	\$ 13,708 80
Reserve for Bad Debts	3,151.00	—
Reserve for Depreciation	22,350 70	10,155 65
Capital Stock	150,000 00	100,000 00
Surplus—Earned	37,650 20	22,378 10
Surplus—Donated	23,500 00	—
	\$283,812 00	\$146,242 55

Prepare a consolidated balance sheet.

Problem 43-3. On December 31, 1933, the balance sheet of Healy Company appeared as follows:

Assets			
Current Assets.			
Cash.		$ 15,000	
Accounts Receivable.			
Adlei Company	$12,000		
Others	30,000	42,000	
Inventory		40,000	$ 97,000
Fixed Assets.			
Cost		$ 71,000	
Reserve for Depreciation		15,000	56,000
Deferred Charges			2,000
			$155,000
Liabilities and Net Worth			
Current Liabilities·			
Accounts Payable			$ 30,000
Net Worth			
Capital Stock—Authorized, 2,000 shares, in treasury, 1,000 shares, outstanding, 1,000 shares		$100,000	
Surplus		25,000	125,000
			$155,000

On the date of the above balance sheet the Adlei Company acquired at 150 a large block of the outstanding stock of Healy Company; after this purchase had been recorded, the books of Adler Company contained the following balances:

Cash	$ 10,000 00	
Accounts Receivable	67,000 00	
Inventory	51,000 00	
Investment in Healy Company	135,000 00	
Plant	215,000 00	
Accounts Payable		$ 45,000 00
Healy Company		12,000 00
Notes Payable (secured by Healy stock)		75,000 00
Reserve for Depreciation		90,000 00
Preferred Stock		100,000 00
Common Stock		200,000 00
Surplus	44,000 00	
	$522,000 00	$522,000 00

Prepare a consolidated balance sheet as of December 31, 1933

Problem 43-4. On July 1, 1934, the Marco Corporation acquired all of the stock of the Armco Corporation, a customer, for $77,000.00, payable 50% in cash and 50% by a six-month note The balance sheets of the two companies on that date, before giving effect to the stock purchase, were as follows.

	Marco Corporation	Armco Corporation
Current Assets	$150,000 00	$ 55,000 00
Fixed Assets	90,000 00	43,000 00
Investments	15,000 00	5,000 00
Other Assets	7,500 00	8,000 00*
	$262,500 00	$111,000 00
Current Liabilities	$ 30,000 00	$ 50,000 00
Capital Stock	200,000 00	50,000 00
Surplus	32,500 00	11,000 00
	$262,500 00	$111,000 00

* Including a claim for $5,000 00 against the Marco Corporation for overcharge on purchases, never recognized or set up by the latter company.

Prepare a consolidated balance sheet as of July 1, 1934.

QUESTIONS AND PROBLEMS ON CHAPTER 44

QUESTIONS

Question 44-1. Describe the method that a parent company should use in recording the profits, losses, and dividends of a subsidiary Explain why this is the proper procedure.

Question 44-2. A corporation owns 85% of the stock of one company, and three shares out of a total of one hundred shares of another company. In what way, if at all, would its records differ in regard to profits earned and dividends paid by the two companies?

Question 44-3. A subsidiary has capital stock of $100,000.00 and surplus of $50,000.00 The parent company buys 90% of the stock and pays $138,000 00 for it. What elimination should be made in preparing a consolidated balance sheet at the date of acquisition, and what is the amount of the goodwill and the minority interest?

Assume that, during the first year after purchase, the subsidiary makes a profit of $20,000.00. What entries should be made to take up the profits?

What would be the balances of the Investment account on the parent company's books, and the Surplus account on the subsidiary's books, at the end of the first year of ownership?

State what elimination should be made and the amount of goodwill, minority interest, and surplus to be shown in the consolidated balance sheet prepared at the end of the year

Question 44-4. Refer to the preceding question and assume that during the second year the subsidiary lost $10,000 00 State how the parent company should take up the loss Also state the balances in the Investment account and the subsidiary's Surplus account at the end of the second year.

How would you make the elimination in preparing a consolidated balance sheet, and what would be the amount of the goodwill and the minority interest? How would you determine the amount of the surplus to appear on the consolidated balance sheet?

Question 44-5. Continuing the preceding question, assume that, just prior to the close of the second year, the subsidiary

declared a dividend of \$9,000 00, payable the following year. What entry should be made by the parent company?

What are the balances of the Investment account and the subsidiary's Surplus account?

Explain how eliminations would be made in preparing a consolidated balance sheet, and state the amount of the goodwill and the minority interest

State how the surplus to be shown in the consolidated balance sheet would be determined, and whether the declaration of the dividend by the subsidiary would alter the amount of surplus to be shown in the consolidated balance sheet.

PROBLEMS

Problem 44-1. On January 1, 1934, Company *A* acquired 85% of the stock of Company *X* at 160 per share. The net worth of Company *X* on that date was reflected by the following balances:

Capital Stock, \$150,000 00 Surplus, \$75,000 00

Also on January 1, 1934, Company *A* acquired 90% of the stock of Company *Y* at 130 per share The net worth of Company *Y* at that date included:

Capital Stock, \$100,000.00 Surplus, \$25,000 00

During 1934, Company *X* made a profit of \$30,000 00 and paid a dividend of \$9,000 00; Company *Y* lost \$5,000.00 and paid a dividend of \$6,000 00

Prepare, in journal form, the entries to be made by Company *A* to record the acquisition of the stocks, the shares of subsidiary profit and loss, and the subsidiary dividends received.

Also prepare working papers to determine the goodwill, minority interests, and consolidated surplus to appear in a consolidated balance sheet on December 31, 1934 The surplus of Company *A* on that date, before taking up the profit and loss of the subsidiaries, was \$72,000.00.

Problem 44-2. The following facts are submitted relative to Company *P* and its subsidiaries, Companies *A*, *B*, and *C*, whose stocks were acquired by Company *P* on January 1, 1934:

	Company *P*	Company *A*	Company *B*	Company *C*
Par value of stock outstanding	\$300,000	\$100,000	\$50,000	\$50,000
Portion of stock owned by Company *P*		90%	85%	80%
Surplus, January 1, 1934	60,000	30,000	40,000	25,000
Cost to Company *P* of stock acquired		125,000	80,000	65,000
Profit (Loss*), 1934	30,000	20,000	5,000*	10,000
Dividends paid, 1934	10,000	6,000	3,000	15,000

The $30,000.00 profit of Company P is the profit before subsidiary profits and loss have been taken up.

Prepare a statement of the parent company's Investment accounts and its Surplus account for the year, including therein the proper entries for the parent company's interests in subsidiary profits and loss.

Also determine the amounts which should appear in a consolidated balance sheet on December 31, 1934, for.

Goodwill
Minority interests
Consolidated surplus.

Problem 44-3. Following are the trial balances of Gary Company and its subsidiaries on December 31, 1933, after closing·

Debits	Gary Company	Royal Company	Cooper Company
Cash .	$ 45,200	$ 16,780	$ 34,400
Accounts Receivable	61,800	33,400	61,050
Inventory	87,800	41,150	55,400
Investment in Royal Company—850 shares	98,100		
Investment in Cooper Company—950 shares	166,700		
Plant and Equipment	203,300	113,500	154,750
Goodwill	25,000	40,000	
	$687,900	$244,830	$305,600
Credits			
Accounts Payable	$102,050	$ 43,130	$ 63,600
Due to Gary Company		12,500	10,000
Bonds Payable	100,000		
Reserve for Depreciation	54,500	60,200	91,500
Capital Stock (Par value $100 00 per share)	400,000	100,000	100,000
Surplus	6,350	29,000	40,500
Sinking Fund Reserve	25,000		
	$687,900	$244,830	$305,600

Prepare consolidated working papers and a balance sheet

Problem 44-4. The Mull Company owns 90% of the stock of the Rice Company and 100% of the stock of the Weld Company; it takes up through its Investment accounts the profits, losses, and dividends of the subsidiaries.

On June 30, 1934, the accounts of the three companies contain the following balances:

Debits	Mull Company	Rice Company	Weld Company
Investment in Weld Company	$111,000 00		
Goodwill	10,000 00	$40,000 00	
Surplus	25,000 00	25,000 00	

Credits	Mull Company	Rice Company	Weld Company
Investment in Rice Company	$ 2,500 00		
Capital Stock .	500,000 00	$50,000 00	$50,000 00
Surplus			50,000 00

What amounts of goodwill, minority interest, and surplus will appear in the consolidated balance sheet as of June 30, 1934?

QUESTIONS AND PROBLEMS ON CHAPTER 45

QUESTIONS

Question 45-1. Assume that a parent company purchased stock at a time when a dividend had been declared but not paid The purchase was made before the date on which the stock records were to be closed to determine the stockholders of record. How should the parent company record the purchase of the stock?

Question 45-2. What are the two general methods used by parent companies in carrying investments in subsidiaries? Which method is preferable, and why?

Question 45-3. A parent company carries its investment in a subsidiary at cost. To what extent will its account balances differ from those which would result from taking up subsidiary profits, losses, and dividends through the Investment account?

Question 45-4. When the parent company carries its subsidiary investment at cost, on what basis should intercompany eliminations be made in the working papers?

PROBLEMS

Problem 45-1. Prepare a consolidated balance sheet as of December 31, 1935, from the following data:

COMPANY *A*

Balance Sheet—December 31, 1935

Cash	$ 75,000 00	
Accounts Receivable	450,000 00	
Inventory	400,000 00	$ 925,000 00
Investment in Company *B*—1,800 Shares Purchased April 30, 1935, for		315,000 00
Machinery and Equipment		510,000 00
Total		$1,750,000 00
Accounts Payable		$ 675,000 00
Capital Stock		500,000 00
Surplus, January 1, 1935	$380,000 00	
Profits for Year	320,000 00	
Total	$700,000 00	
Less Dividends Paid in February, 1935	125,000 00	575,000 00
Total		$1,750,000 00

COMPANY *B*

Balance Sheet—December 31, 1935

Cash	$ 25,000	
Accounts Receivable	55,000	
Inventory	115,000	$195,000
Machinery and Equipment		477,000
Total		$672,000
Accounts Payable		$292,000
Capital Stock, 2,000 Shares		200,000
Surplus, January 1, 1935	$120,000	
Profits (Earned Proportionately throughout the Year)	60,000	180,000
Total		$672,000

Problem 45-2. On December 31, 1932, Company X purchased 850 shares (85%) of the $100 00 par value stock of Company Y, at $150 00 per share. Following is an abstract of the Surplus accounts of the two companies for the two subsequent years:

	Company X	Company Y
Balance, December 31, 1932	$75,000 00	$40,000 00
1933 Profits	15,000 00	7,000 00
Dividends Paid	9,000 00*	6,000 00*
Dividends Received	5,100 00	
Balance, December 31	$86,100 00	$41,000 00
1934 Profits	8,000 00	3,000 00*
Dividends Paid	9,000 00*	4,000 00*
Dividends Received	3,400 00	
Balances, December 31	$88,500 00	$34,000 00

* Debit

Determine the minority interest, goodwill, and consolidated surplus to appear in the consolidated balance sheets as of:

(a) December 31, 1933
(b) December 31, 1934

Problem 45-3. On January 1, 1934, Company A acquired 95% of Company B's stock and 90% of Company C's stock at the prices shown in the following balance sheets as of June 30, 1934:

	Balance Sheets		
	Company A	Company B	Company C
Assets			
Current Assets	$ 750,000	$ 310,000	$ 75,000
Plant Property	910,000	1,000,000	600,000
Goodwill			35,000
Investments in Subsidiaries:			
Company B	975,000		
Company C	625,000		
	$3,260,000	$1,310,000	$710,000

Liabilities			
Current Liabilities	$ 360,000	$ 250,000	$ 10,000
Capital Stock	2,250,000	1,000,000	400,000
Surplus, January 1, 1934	525,000	30,000	250,000
Net Profit, Six Months Ended June 30, 1934	125,000	30,000	50,000
	$3,260,000	$1,310,000	$710,000

Prepare a consolidated balance sheet

Problem 45-4. Prepare a consolidated balance sheet, from the following data:

Balance Sheets—December 31, 1934

	Company *W*	Company *X*	Company *Y*	Company *Z*
Assets				
Current Assets	$1,825,000	$ 545,000	$ 250,000	$ 535,000
Investments in Subsidiaries—At Cost				
Company *X*—75%	850,000			
Company *Y*—80%	475,000			
Company *Z*—90%	1,000,000			
Fixed Assets		550,000	725,000	550,000
Deferred Charges		25,000	35,000	25,000
	$4,150,000	$1,120,000	$1,010,000	$1,110,000
Liabilities and Net Worth				
Current Liabilities		$ 100,000	$ 300,000	$ 100,000
Capital Stock	$3,000,000	600,000	800,000	800,000
Surplus	1,150,000	420,000	90,000*	210,000
	$4,150,000	$1,120,000	$1,010,000	$1,110,000

* Deficit

The investment in Company *X* was acquired on January 1, 1931, since that date, Company *X* has made profits of $550,000.00, and paid dividends of $144,000.00.

The investment in Company *Y* was acquired on July 1, 1929, at that date, Company *Y* had a deficit of $375,000 00

The investment in Company *Z* was acquired on July 1, 1931. The Surplus account of Company *Z* is summarized as follows:

Balance, December 31, 1931	$130,000 00
Profits for four years (assumed to have been earned in equal monthly amounts)	400,000 00
Total	$530,000 00
Less Dividends—$80,000 Paid Annually on June 30	320,000 00
Balance, December 31, 1934	$210,000 00

Problem 45-5. Following are the balance sheets of three affiliated companies on December 31, 1935:

	Company *A*	Company *B*	Company *C*
Cash	$ 10,000 00	$12,000.00	$ 8,000 00
Accounts Receivable		27,000 00	14,000 00
Inventories		18,000.00	13,000 00
Investments in Subsidiary Companies			
Company *B* (425 Shares)	60,000 00		
Company *C* (400 Shares)	52,000 00		
Plant and Equipment		40,000.00	30,000 00
	$122,000 00	$97,000 00	$65,000 00
Accounts Payable	$ 7,000 00	$15,000 00	$12,000 00
Capital Stock—$100 Par Value	100,000 00	50,000 00	50,000 00
Surplus	15,000 00	32,000 00	3,000 00
	$122,000 00	$97,000 00	$65,000 00

Company *A* has recorded all dividends received by credits to the Investment accounts, it has taken up through the Investment accounts all subsidiary profits and losses except those of the year ended December 31, 1935, which are reflected in the following statement

Analysis of Surplus

	Company *B*	Company *C*
Balance, January 1, 1935	$22,000 00	$15,000 00
Net Profit (Loss*)	20,000 00	9,000 00*
Total	$42,000 00	$ 6,000 00
Dividends Paid	10,000 00	3,000 00
Balance, December 31, 1935	$32,000 00	$ 3,000 00

Prepare a consolidated balance sheet as of December 31, 1935

QUESTIONS AND PROBLEMS ON CHAPTER 46

QUESTIONS

Question 46-1. A parent company holding notes receivable from a subsidiary company to the extent of $100,000.00 indorses and discounts these notes with its bankers, thus creating a contingent liability thereunder. State how and where the liability would appear, if at all, in a consolidated balance sheet of the two companies.

Question 46-2. State how you would treat the following item in preparing a balance sheet of the parent company, and a consolidated balance sheet: "Dividends declared and receivable on stock of a subsidiary company"

Question 46-3. A parent company owns 90% of the capital stock of a subsidiary company The directors of the subsidiary company pass a resolution appropriating surplus earnings as dividends and direct the treasurer to remit to the parent company whenever surplus funds are available. The subsidiary company earns $60,000 00, which it pays to the parent company. What are the rights of interested parties and how should they be shown on the consolidated statements?

Question 46-4. In the process of consolidating several competing establishments, Corporation *A*, the parent company, acquires $98,000 00 of a total of $100,000 00 of the capital stock of Company *B*. At the time of the purchase, the balance sheet of Company *B* showed surplus and undivided profits of $50,000.00. Corporation *A* bought the stock of *B* at 200%. Almost immediately after the purchase, Company *B* paid a cash dividend of 25%. In what way would the payment of this dividend affect

(a) The balance sheet of *B*?
(b) The balance sheet of *A*?
(c) The consolidated balance sheet of *A* and its subsidiaries?

Question 46-5. A company owns all of the capital stock of another company. This subsidiary company has outstanding an issue of bonds not guaranteed by the company holding the stock. The assets of the subsidiary company are deemed insufficient to

cover the bonds, so that its capital stock has no value. The parent company desires the auditor to prepare its balance sheet, setting up the assets of this subsidiary company, as well as other assets directly owned, and the bonds as liabilities. Under the circumstances, is the auditor justified in preparing such a balance sheet? Give reasons for your answer

PROBLEMS

Problem 46-1. From the data given below, as of September 30, 1934, prepare a consolidated balance sheet:

	Company *A*	Company *B*	Company *C*
Assets			
Cash	$ 27,000 00	$ 10,000 00	$ 45,500 00
Notes Receivable	45,000 00	10,000 00	20,000 00
Accounts Receivable	65,000 00	25,000 00	150,000 00
Inventories...	126,000 00	50,000 00	382,750 00
Advances to Company *A*			50,000 00
Advances to Company *B*.	25,000 00		
Stock of *A*:			
Common (cost $110 00 a share)			173,250 00
Stock of *B*			
Common (cost $90 00 a share)			36,000 00
Bonds of Company *B*	45,000 00		
Plant and Equipment	240,000 00	150,000 00	750,000 00
Deferred Charges.	3,000 00	5,000 00	15,000 00
	$576,000 00	$250,000 00	$1,622,500 00
Liabilities			
First Mortgage Bonds		$ 85,000.00	$ 300,000 00
Notes Payable	$ 66,000 00		34,000 00
Accounts Payable (including advances from affiliated companies)	75,000 00	35,000.00	110,000.00
Dividends Payable	875 00		
Accrued Bond Interest Payable		2,550.00	6,000.00
Reserve for Depreciation	100,000 00	40,000 00	150,000 00
Capital Stock			
Preferred (Non-Participating)	50,000 00	25,000 00	250,000 00
Common	175,000 00	50,000 00	500,000 00
Surplus	109,125 00	12,450 00	272,500 00
	$576,000 00	$250,000 00	$1,622,500 00

An examination of the records of Company *A* shows that on September 30, 1934, that company advanced to Company *B* $10,000 00, which was not received and taken up on the records of the latter until October 2, 1934

Surplus of subsidiaries at the dates of stock acquisition.

Company *A*	$65,000 00
Company *B*	—

The Dividends Payable appearing on the books of Company *A* represents a quarterly dividend of $ 50 a share of its common stock, declared September 20, 1934, payable on October 20, 1934, to stockholders of record on September 30, 1934. Dividends on the preferred stocks of all companies have been paid to September 30, 1934.

It is the custom of all three companies to take up income from investments on their books only when received

All capital stock, both preferred and common, has a par value of $100 00 a share.

Problem 46-2. From the following balance sheets and explanatory data, prepare a consolidated balance sheet·

COMPANY *X*

Balance Sheet—December 31, 1931

Assets	
Cash	$ 20,000 00
Investment in Company *Y*—1,400 shares, profits taken up annually, dividends credited as received	210,000 00
Investment in Company *Z*—4,000 shares, at cost, January 1, 1931	200,000 00
	$430,000 00
Liabilities and Net Worth	
Current Liabilities	$ 40,000 00
Collateral Gold Notes, due 1939	100,000 00
Capital Stock—	
Preferred: 1,000 shares, par value $100 00	100,000 00
Common· 10,000 shares, no par value	150,000 00
Surplus	40,000 00
	$430,000 00

COMPANY *Y*

Balance Sheet—December 31, 1931

Assets		
Cash		$ 60,000 00
Receivables		100,000 00(1)
Inventories		100,000 00
		$260,000 00
Liabilities and Net Worth		
Current Liabilities		$ 36,000 00(2)
Capital Stock—		
2,000 shares, par value $100 00		200,000 00
Surplus—		
Balance, January 1, 1931	$40,000 00	
Add Profit for Year	14,000 00	
	$54,000 00	
Less Dividends	30,000 00	24,000 00
		$260,000 00

COMPANY *Z*

Balance Sheet—December 31, 1931

Assets		
Cash		$ 55,000 00(3)
Receivables		40,000 00
Inventories		100,000 00
Land, Buildings, and Equipment as appraised by General Appraisal Co , December 31, 1931, at sound value of		113,000 00
		$308,000 00
Liabilities and Net Worth		
Current Liabilities		$ 83,000 00
Capital Stock—		
5,000 shares, par value $50 00		250,000 00
Deficit—		
Balance, January 1, 1931	$100,000 00	
Profit for Year 1931	75,000 00	25,000 00*
		$308,000 00

Notes

(1) Includes $25,000 00 due from *Z* Company

(2) Includes 10% dividend payable January 4, 1932

(3) After remitting $25,000 00 to Company *X* on December 30, 1931, the check was not received by *X* until January, 1932.

Problem 46-3. Following are trial balances after closing on December 31, 1933, for Auto Sales Corporation, Green Motor Car Company, and Motor Bodies, Incorporated. Prepare a consolidated balance sheet

AUTO SALES CORPORATION

	Debits	Credits
Cash	$ 127,510	
Advances to Subsidiaries	346,800	
Stock of Green Motor Car Co	500,000	
Stock of Motor Bodies, Inc	165,000	
Bonds of Green Motor Car Co (par $100,000 00)	85,000	
Bonds of Motor Bodies, Inc (par $50,000 00)	52,000	
Cars on Hand	400,000	
Accounts Receivable	260,000	
Notes Receivable	700,000	
Fixtures and Equipment	125,000	
Improvements on Leased Property, Proportion Chargeable to Future Operations	25,000	
Common Stock...		$1,000,000
Preferred Stock		500,000
Surplus		295,000
Reserve for Losses on Accounts Receivable		71,310
Notes Receivable Discounted		650,000
Reserve for Contingent Losses		100,000
Accounts Payable		40,000
Reserve for Depreciation		45,000
Green Motor Car Co —Current Account.		85,000
	$2,786,310	$2,786,310

GREEN MOTOR CAR COMPANY

	Debits	Credits
Patent Rights	$ 750,000	
Machinery and Tools	300,000	
Land and Buildings	200,000	
Fixtures and Other Equipment	50,000	
Cars Completed	100,000	
Cars in Process	250,000	
Materials and Unassembled Parts	175,000	
Auto Sales Corporation—Current Account	85,000	
Accounts Receivable	9,700	
Cash	80,000	
Motor Bodies, Inc, Stock	50,000	
Capital Stock		$ 750,000
Bonds Payable		750,000
Surplus		126,000
Accounts Payable		74,000
Reserve for Depreciation of Fixed Assets		24,700
Notes Payable for Advances		200,000
Motor Bodies, Inc.—Current Account		125,000
	$2,049,700	$2,049,700

MOTOR BODIES, INC

	Debits	Credits
Land and Buildings	$100,000 00	
Machinery and Tools	75,000 00	
Building Fixtures	35,000 00	
Completed Bodies	50,000 00	
Bodies in Process.	75,000 00	
Materials	86,800 00	
Green Motor Car Co —Current Account	125,000 00	
Accounts Receivable	7,500 00	
Patents	200,000 00	
Cash	50,000 00	
Capital Stock		$250,000 00
Bonds Payable		250,000 00
Surplus		45,000 00
Dividends Payable (January 15, 1934)		7,500 00
Accounts Payable		65,000 00
Reserve for Depreciation		40,000 00
Notes Payable for Advances		146,800 00
	$804,300 00	$804,300 00

All of the intercompany stockholdings were acquired at par on the dates of organization of the subsidiary companies.

Problem 46-4. The Artex Company acquired 22,500 shares of common capital stock of The Burnam Corporation as of December 31, 1926, at a cost of $2,000,000 00 On June 30, 1928, it acquired 4,000 shares of the common capital stock of The Plymouth Machine Company at $200 00 a share. The balance sheets of the two

companies at the dates of acquisition of their stocks were as follows:

THE BURNAM CORPORATION

Balance Sheet—December 31, 1926

Assets	
Cash	$ 300,000 00
Customers' Notes and Accounts	700,000 00
Inventories	800,000 00
Land	125,000 00
Buildings	500,000 00
Machinery and Equipment	750,000 00
Prepaid Expenses	25,000 00
	$3,200,000 00
Liabilities	
Notes and Accounts Payable	$ 200,000 00
Federal Income Taxes Payable	30,500 00
Accrued Interest	3,000 00
Other Accrued Expenses	1,500 00
Reserve for Depreciation	200,000.00
Reserve for Doubtful Accounts	15,000 00
Capital Stock.	
Preferred—4,500 shares (par value $100 00)	450,000 00
Common—30,000 shares (no par value) ..	1,500,000 00
Surplus . .	800,000 00
	$3,200,000 00

THE PLYMOUTH MACHINE COMPANY

Balance Sheet—June 30, 1928

Assets	
Cash	$ 150,000.00
Customers' Notes and Accounts	300,000 00
Inventories	450,000 00
Land	50,000 00
Buildings	200,000 00
Machinery and Equipment	370,000 00
Discount on First Mortgage Bonds	26,443 00
Prepaid Expenses	15,000 00
	$1,561,443 00
Liabilities	
Notes and Accounts Payable	$ 150,000 00
Federal Income Taxes Payable	15,000 00
Accrued Interest	
On First Mortgage Bonds	9,208 00
On Notes Payable	1,235 00
Other Accrued Expenses	1,000 00
Fifteen-Year 6½% First Mortgage Bonds due 1940	425,000 00
Reserve for Depreciation	100,000 00
Reserve for Uncollectible Accounts	10,000 00
Capital Stock.	
Preferred—2,000 shares (par value $50 each)	100,000 00
Common—5,000 shares (par value $100 each)	500,000 00
Surplus .	250,000 00
	$1,561,443 00

On February 1, 1931, The Artex Company purchased $50,000 00 par value of the First Mortgage Bonds of The Plymouth Machine Company at 80, and on July 1, 1931, it made another purchase of $25,000 00 of these bonds at 75 A total of $500,000 00 of these bonds was originally issued as of March 1, 1925, and sold to bankers at 92, interest payable semiannually on March 1 and September 1.

The balance sheets of the three companies on September 30, 1931, were as follows:

	Artex Company	Burnam Corporation	Plymouth Machine Company
Assets			
Cash	$ 1,000,000	$ 182,800	$ 100,000
Customers' Notes and Accounts	2,500,000	700,000	200,000
Inventories	3,000,000	834,400	450,000
Advances to Subsidiaries	500,000	—	—
Investments			
$75,000 00 par value of Plymouth Machine Co Bonds	58,750	—	—
Capital Stocks of Subsidiaries	2,800,000	—	—
Land	400,000	125,000	65,000
Buildings	1,500,000	750,000	200,000
Machinery and Equipment	3,000,000	1,025,000	484,000
Discount on First Mortgage Bonds	—	—	15,711
Prepaid Expenses	30,000	20,000	10,485
	$14,788,750	$3,637,200	$1,525,196
Liabilities			
Notes and Accounts Payable	$ 2,500,000	$ 50,000	$ 100,000
Federal Income Tax Payable	25,000	10,000	—
Accrued Interest:			
On First Mortgage Bonds	—	—	1,896
On Notes Payable	23,750	1,000	300
Other Accrued Expenses	40,000	1,200	500
Due to The Artex Company	—	250,000	250,000
Fifteen-Year 6½% First Mortgage Bonds	—	—	350,000
Reserve for Depreciation	1,500,000	450,000	160,000
Reserve for Uncollectible Accounts	200,000	25,000	12,500
Capital Stock			
Preferred	—	450,000	100,000
Common	7,500,000	1,500,000	500,000
Surplus	3,000,000	900,000	50,000
	$14,788,750	$3,637,200	$1,525,196

There were 75,000 shares of capital stock of The Artex Company outstanding on September 30, 1931. There had been no change in the outstanding stocks of the other two companies during the previous five years

Dividends on the preferred stocks of the subsidiaries were

cumulative, in both cases, at the rate of 7% per annum. In the case of The Burnam Corporation, the preferred dividends were payable quarterly on the first days of February, May, August, and November, and had been paid regularly since the organization of the company. Preferred dividends of The Plymouth Machine Company were payable semiannually on March 1 and September 1, and the last dividend paid was for the six months ended March 1, 1930 Prior to that time, they had never been in arrears. All preferred stocks are non-participating.

The Artex Company takes up interest on Plymouth Company bonds only when received.

Prepare a consolidated balance sheet as of September 30, 1931, showing the figures for the companies separately with eliminations and consolidation.

No goodwill is to be shown on the consolidated balance sheet.

Show amounts to the nearest dollar.

QUESTIONS AND PROBLEMS ON CHAPTER 47

QUESTIONS

Question 47-1. Assume that a company had a capital stock of \$40,000 00 and a surplus of \$10,000 00. Additional stock of a par value of \$160,000.00 was issued to another company which had hitherto owned none of the stock. This company paid \$230,000.00 for the stock State the amount of goodwill which would appear in the consolidated balance sheet and the amount of the minority interest

Question 47-2. To what extent, if at all, will the method of making eliminations be affected by the fact that the holding company holds subsidiary stock of no-par value?

Question 47-3. On January 1, 1933, Company *A* acquires 90% of the stock of Company *B* and 80% of the stock of Company *C*. Included in Company *C*'s inventory are goods produced by Company *B* at a cost of \$10,000 00 and billed to Company *C* at \$12,000 00. How should this condition be shown in a consolidated balance sheet prepared on January 1, 1933?

Question 47-4. Company *X* owns 90% of the stock of Company *Y*, and 85% of the stock of Company *Z*, *X* has owned this stock for several years A consolidated balance sheet is to be prepared, on December 31, 1933, at which time there are goods in Company *Z*'s inventory which were acquired from Company *Y*. The cost to Company *Y* was \$20,000 00, and the selling price to Company *Z* was \$25,000 00. How should this condition be dealt with?

Question 47-5. What difficulty exists in connection with the establishment of a reserve for intercompany profits in construction which does not exist in connection with intercompany profits in inventories?

PROBLEMS

Problem 47-1. Company *A* acquired \$75,000 00 (par value) of the capital stock of Company *B* in exchange for its own preferred stock of a par value of \$100,000 00 The surplus of Company *B*

at the date of acquisition was $20,000 00 Balance sheets of the two companies on December 31, 1934, were as follows

	Company *A*	Company *B*
Assets		
Cash	$ 15,000 00	$ 1,500 00
Accounts Receivable	80,000 00	15,000 00
Notes Receivable	95,000 00	
Advances to Company *B*	25,000 00	
Inventories	80,000 00	95,000 00
Investments		
In Company *B*	100,000 00	
Miscellaneous	15,000 00	
Land and Buildings—Depreciated Value	70,000 00	
Store Fixtures—Depreciated Value	15,000 00	
Machinery and Equipment—Depreciated Value		115,000 00
Prepaid Expenses	5,000 00	3,000 00
	$500,000 00	$229,500 00
Liabilities		
Accounts Payable	$ 20,000 00	$ 14,700 00
Notes Payable		
Company *B*	20,000 00	
Banks	35,000 00	10,000 00
Trade Creditors		15,000 00
Accrued Liabilities	3,000 00	
Company *A*		25,000 00
Mortgage on Land and Buildings	30,000 00	
Capital Stock—$100 00 Par Value		
Preferred	300,000 00	
Common	50,000 00	80,000 00
Surplus	42,000 00	84,800 00
	$500,000 00	$229,500 00

Company *B* was contingently liable on December 31, 1934, on notes receivable discounted in the following amounts:

Notes of customers of Company *B*	$15,000 00
Notes of Company *A*	20,000 00
Notes of customers of Company *A*, indorsed by Company *A* and transferred to Company *B* in payment of merchandise, reindorsed by Company *B* and discounted at bank	12,000 00

Dividends at the rate of 6% were declared by both companies on December 31, 1934, on all classes of stock; they have not been paid or recorded

Inventories of Company *A* contain goods sold to it by Company *B* at a profit of $8,000 00.

Prepare a consolidated balance sheet.

Problem 47-2. Following are the balance sheets of Companies *M* and *N* as of December 31, 1929:

COMPANY *M*

Balance Sheet

Assets

Current		
Cash	$ 50,000	
Accounts Receivable—Customers	800,000	
Accounts Receivable—*N* Company	100,000	
Inventories	480,000	$1,430,000
Fixed—Less Reserve for Depreciation		3,500,000
Investment in *N* Company (Cost of 3,800 shares of preferred and 23,520 shares of common, acquired July 1, 1929)		800,000
Prepaid Expenses		20,000
Goodwill		1,000,000
		$6,750,000

Liabilities

Current		
Notes Payable	$ 400,000	
Accounts Payable	200,000	
Dividends Payable	105,000	
Accruals	45,000	$ 750,000
Funded Debt—First Mortgage Bonds		2,000,000
Capital Stock		
Preferred—6%, cumulative, $100 00 each	$1,000,000	
Common—30,000 shares, no-par value	2,500,000	3,500,000
Surplus.		500,000
		$6,750,000

COMPANY *N*

Balance Sheet

Assets

Current		
Cash	$ 15,000	
Accounts Receivable—Customers	300,000	
Inventories	150,000	$ 465,000
Fixed—Less Reserve for Depreciation		800,000
Prepaid Expenses		5,000
Goodwill		250,000
		$1,520,000

Liabilities

Current		
Notes Payable	$ 100,000	
Accounts Payable	150,000	
Dividends Payable	29,000	
Accruals	21,000	$ 300,000
Funded Debt—Serial Gold Notes		400,000
Capital Stock		
Preferred—4,000 shares, non-participating, no-par value, entitled to cumulative dividends of $5.00 per share	$ 300,000	
Common—24,000 shares, no-par value	400,000	700,000
Surplus		120,000
		$1,520,000

Particulars of the Surplus accounts of the respective companies are shown as follows:

COMPANY *M*

1929			
Jan 1	Balance		$345,250
Mar 31	Preferred dividends, March quarter .	$ 15,000	
June 30	Net income for the half year		120,000
	Dividends—Preferred, June quarter	15,000	
	Dividends—Common, half year	90,000	
Sept 30	Preferred dividends, September quarter	15,000	
Oct 15	Dividend received on *N* Company preferred stock for quarter ended September 30th		4,750
Dec 31	Net income for the half year		270,000
	Dividends—Preferred, December quarter	15,000	
	Dividends—Common, half year	90,000	
	Balance .	500,000	
		$740,000	$740,000

COMPANY *N*

1929			
Jan 1	Balance . .		$ 44,000
Mar 31	Preferred dividend, March quarter	$ 5,000	
June 30	Net loss for the half year	50,000	
	Preferred dividend, June quarter	5,000	
July 1	Increase on appraisal of fixed assets		90,000
Sept 30	Preferred dividend, September quarter	5,000	
Dec 31	Net income for the half year. .		80,000
	Dividends—Preferred, December quarter	5,000	
	Dividends—Common .	24,000	
	Balance .	120,000	
		$214,000	$214 000

From the foregoing data, you are required to prepare a consolidated balance sheet as of December 31, 1929

Problem 47-3. Following are the balance sheets of White Company and its two subsidiaries on December 31, 1934:

	White Company	Black Company	Green Company
Assets			
Cash .	$ 40,000	$ 35,000	$ 30,000
Inventories .	325,000	190,000	133,000
Fin Gds on Consignment—at Selling Price			100,000
Accounts Receivable	160,000	70,000	25,000
Advances to Black Company	135,000		
Advances to Green Company	97,000		
Investment in Black Company	260,000		
Investment in Green Company	105,000		
Real Estate, Machinery, Etc	1,000,000	275,000	60,000
Goodwill .	1,000,000	200,000	
	$3,122,000	$770,000	$348,000

Liabilities and Net Worth			
Accounts Payable	$ 77,000	$105,000	$81,000
Notes Payable	225,000	85,000	60,000
White Company		135,000	97,000
First Mortgage, 6%, Gold Bonds	500,000		
Capital Stock—Par Value $100 00			
Preferred, 7%, Cumulative	1,000,000		
Common	1,000,000	150,000	150,000
Surplus	320,000	295,000	40,000*
	$3,122,000	$770,000	$348,000

* Deficit

The consigned goods cost the Green Company $70,000.00

The investment in the Black Company represents the cost of a 95% interest, acquired when the Black Company had a surplus of $240,000 00.

The investment in Green Company represents the cost of a 100% interest, acquired when the Green Company had a deficit of $60,000 00.

The inventories of The White Company contain goods purchased from the Black Company and the Green Company, on which these subsidiaries made profits of $12,000 00 and $6,000 00, respectively.

Prepare a consolidated balance sheet as of December 31, 1934

Problem 47-4. Prepare a consolidated balance sheet as of December 31, 1935, from the following individual balance sheets:

	X	A	B
Assets			
Cash	$ 40,000 00	$ 9,000 00	$ 4,000 00
Accounts Receivable	8,000 00(a)	50,000 00	30,000 00
Notes Receivable		25,000 00(b)	20,000 00(c)
Inventory		40,000 00(d)	33,000 00(e)
Treasury Stock		12,000 00(f)	
800 Shares "A" Common	145,000 00(g)		
200 Shares "B" Preferred	15,000 00(g)		
700 Shares "B" Common	50,000 00(g)		
Sinking Fund Investments		6,000 00(h)	
Deficit			20,000 00(i)
Plant		75,000 00(j)	65,000 00
	$258,000 00	$217,000 00	$172,000 00
Liabilities and Net Worth			
Accounts Payable	$ —	$ 5,000 00	$ 16,000 00
Notes Payable .	—	10,000 00	12,000 00
Bonds Payable	40,000 00(k)	50,000 00	40,000 00
Reserve for Depreciation	—	5,000 00	4,000 00
Sinking Fund Reserve .	—	6,000 00(l)	—
Premium on Bonds	8,000 00	—	—
Common Stock (Par $100)	200,000 00	100,000 00	75,000 00
Preferred Stock (Par $100)	—	—	25,000 00(m)
Surplus	10,000 00	41,000 00(n)	—
	$258,000 00	$217,000 00	$172,000 00

(a) Represents advances to B, which are placed on B's books at only \$7,500 00, as the payment of B's note for \$500 00 by X has not yet been recorded by B
(b) Includes B's note for \$10,000 00
(c) Not including \$1,000 00 undue notes receivable discounted made by A, and \$500 00 made by an outside solvent firm
(d) Valued at cost to A, includes \$990 00 goods purchased from B, on which B made a profit of \$300 00
(e) Valued at selling price, gross profit on cost of sales, 10%
(f) 100 shares purchased January 1, 1935, on open market
(g) Purchased January 1, 1935, on open market
(h) Represents five \$1,000 00 bonds purchased from X on July 1, 1935
(i) Balance January 1, 1935, was \$11,000 00
(j) Includes \$26,000 00 plant addition made by B at end of 1935 at cost of \$20,000 00
(k) Issued July 1, 1935, at 120, due July 1, 1955
(l) Created July 1, 1935
(m) Cumulative 7% dividend for year, undeclared Stock is preferred as to assets
(n) Balance, January 1, 1935, was \$18,000 00

Problem 47-5. Company P obtained controlling interests in three companies, A, B, and C, on January 1, 1933 The balance sheets of the four companies on December 31, 1933, were as follows:

	Company P	Company A	Company B	Company C
Assets				
Cash	\$ 50,000	\$ 75,000	\$ 15,000	\$ 60,000
Accounts Receivable		120,000	55,000	95,000
Company A	100,000			
Company C	50,000			
Inventories		225,000	130,000	75,000
Fixed Assets		985,000	615,000	425,000
Investments in Subsidiaries				
Company A—70%	950,000			
Company B—80%	650,000			
Company C—90%	500,000			
	\$2,300,000	\$1,405,000	\$815,000	\$655,000
Liabilities				
Accounts Payable	\$ 40,000	\$ 30,000	\$ 55,000	\$ 65,000
Company P		100,000		50,000
Capital Stock	2,000,000	1,000,000	800,000	400,000
Surplus	260,000	275,000	40,000*	140,000
	\$2,300,000	\$1,405,000	\$815,000	\$655,000

The Surplus accounts of the four companies for 1933 are detailed below:

Balance, December 31, 1932	\$266,400	\$190,000	\$90,000*	\$120,000
Net Profit—1933		145,000	50,000	44,000
Dividends Received	63,600			
Write-Up Stock of Company A	50,000			
Total	\$380,000	\$335,000	\$40,000*	\$164,000
Dividends Paid	120,000	60,000		24,000
Balance—December 31, 1933	\$260,000	\$275,000	\$40,000*	\$140,000

The inventories of Company A include \$100,000 00 of goods purchased from Company B in 1933. The cost to Company B

was $80,000.00.

Part of the plant of Company *B* was purchased from Company *C* on December 31, 1933. The depreciated value of this property on *C*'s books was $100,000.00, and the sale price to Company *B* was $110,000 00

On December 28, 1933, part of Company *C*'s plant, carried at $20,000 00, was destroyed by fire The property account was credited with the salvage of $5,000 00, and no other entries were made, pending the insurance settlement The claim was settled in 1934 for $12,500 00

Prepare a consolidated balance sheet

QUESTIONS AND PROBLEMS ON CHAPTER 48

QUESTIONS

Question 48-1. Assume that, at the date of preparing the consolidated balance sheet, the subsidiary has a deficit Should the minority interest be shown at the par value of the stock or at the par value minus a portion of the deficit?

Question 48-2. Assume that a subsidiary issues a stock dividend. State how you would record the stock dividend, if at all, on the parent company's books, under the following conditions, and give your reasons:

(a) The parent company carries its investment at cost
(b) The parent company takes up the subsidiary profits, losses, and cash dividends

Question 48-3. A parent company owns the stock of a subsidiary company, for the purchase of which it issued two shares of its own stock for each share of the subsidiary company's stock. The assets of the subsidiary company were sold, and after the debts of such subsidiary company were liquidated, the remaining balance was paid in cash to the parent company. How should the cash so received be treated on the books of the parent company?

Question 48-4. If, in consolidating the accounts of a parent company and its subsidiary companies, you found that, in the case of one of the subsidiary companies, the parent company owned only 60% of its voting stock, state briefly how you would treat this subsidiary company account in the consolidated balance sheet, and why your proposed treatment would reflect the true financial position of the combined companies more clearly than other methods with which you may be familiar.

Question 48-5. On July 1, 1933, Corporation *A* received an option to purchase all of the assets of Corporation *B* for $1,000,000 00, payable $50,000 00 upon the date of the option and $50,000 00 semiannually thereafter until the expiration date, July 1, 1935, when the balance will be due The assets appear at a value of $800,000 00 in the accounts of Corporation *B*. If the option is

not taken up on or before the expiration date, the payments made are forfeited to Corporation *B* Corporation *B* had no surplus on June 30, 1933, all of its income having been distributed Subsequent to July 1, 1933, all its income, together with the money received from Corporation *A*, was paid out in dividends You are auditing the accounts of Corporation *C*, which is a stockholder in Corporation *B* and has received dividends from that company, which have been credited to Profit and Loss. State whether you would accept the entries on the books of Corporation *C*, and if you would not, state how you would advise that the matter be handled

PROBLEMS

Problem 48-1. Following is the balance sheet of The Washburn Company on December 31, 1934.

THE WASHBURN COMPANY

Balance Sheet—December 31, 1934

Assets		
Current Assets		
Accounts Receivable	$ 25,000	
Inventory	200,000	$ 225,000
Intercompany Accounts		
The Midland Company	$ 75,000	
The Blackthorn Company	20,000	95,000
Investments		
$50,000 in The Blackthorn Company Bonds	$ 50,000	
150 Shares in The Blackthorn Company	25,000	
800 Shares in The Midland Company (Preferred)	80,000	
2,000 Shares in The Midland Company (Common)	375,000	530,000
Fixed Assets		900,000
Deferred Charges to Operation		15,000
		$1,765,000
Liabilities		
Current Liabilities		
Accounts Payable	$ 70,000	
Bond Interest Accrued	10,000	$ 80,000
First Mortgage 6% Bonds		500,000
Reserve for Depreciation		300,000
Capital Stock—Total Authorized and Issued		
5,000 Shares of $100 00 Each		500,000
Surplus:		
Balance, December 31, 1933	$225,000	
Profit for the Year 1934	160,000	385,000
		$1,765,000

All of the investments included in the foregoing balance sheet were acquired on January 1, 1934, and are stated at cost, except that $75,000 00 has been added to the book value of the common stock

of The Midland Company by a credit to Profit and Loss.

THE BLACKTHORN COMPANY

Balance Sheet—December 31, 1934

Assets

Current Assets		
Accounts Receivable	$18,000 00	
Inventory	62,000 00	$ 80,000 00
Investments		
100 Shares in The Midland Company (Preferred)—Cost		10,000 00
Fixed Assets		150,000 00
Deferred Charges		10,000 00
		$250,000 00

Liabilities

Current Liabilities		
Accounts Payable	$14,500 00	
Bond Interest Accrued	500 00	$ 15,000 00
Intercompany Accounts		
The Washburn Company	$20,000 00	
The Midland Company	15,000 00	35,000 00
First Mortgage 6% Bonds		50,000 00
Reserve for Depreciation		15,000 00
Capital Stock—Total Authorized and Issued:		
750 Shares at $100 00 Each		75,000 00
Surplus		
Balance, December 31, 1933	$30,000 00	
Profit for the Year 1934	30,000 00	60,000 00
		$250,000 00

Following is the balance sheet of The Midland Company The stock of The Blackthorn Company, shown therein at cost, was acquired at the date of organization of the latter-named company. The Midland Company's preferred stock is preferred as to assets and as to 6% cumulative dividends No dividends were in arrears at the dates of acquisition of this stock by the other companies, nor on December 31, 1934.

THE MIDLAND COMPANY

Balance Sheet—December 31, 1934

Assets

Current Assets:		
Accounts Receivable	$ 56,000 00	
Inventory	74,000 00	$130,000 00
Intercompany Accounts		
The Blackthorn Company		15,000 00
Investments		
500 Shares in The Blackthorn Company—Cost		50,000 00
Fixed Assets		540,000 00
Deferred Charges to Operations		19,950 00
		$754,950 00

Liabilities

Current Liabilities.		
Accounts Payable	$ 30,500 00	
Bond Interest Accrued	1,500 00	
Preferred Dividend, Payable January 1, 1935	3,000 00	$ 35,000 00
Intercompany Accounts		
The Washburn Company		75,000 00
First Mortgage 6% Bonds		150,000 00
Reserve for Depreciation		20,000 00
Capital Stock—Total Authorized and Issued		
Preferred, 1,000 Shares	$100,000 00	
Common, 2,500 Shares	250,000 00	350,000 00
Surplus:		
Balance, December 31, 1933	$ 75,000 00	
Profit for the Year 1934	49,950 00	124,950 00
		$754,950 00

Prepare a consolidated balance sheet

Problem 48-2. On December 31, 1930, Company *A* had $500,000.00 of outstanding stock and a surplus of $115,000.00 Company *B* had 10,000 shares of authorized stock, of $100 00 par value, of which 8,000 shares were outstanding; and a surplus of $48,000 00 after the declaration of a 6% dividend, payable February 1, 1931, to holders of record, January 15, 1931.

Company *A*, on December 31, 1930, purchased 90% of the outstanding stock of Company *B* at 120 per share, the purchase was registered on Company *B*'s books on January 10, 1931.

The profits of the two companies for the six months ended June 30, 1931 were: Company *A*, $30,000.00, Company *B*, $24,000 00.

On July 1, 1931, the directors of Company *B* authorized the sale of the unissued stock at a price equal to the book value of the stock then outstanding, after the declaration of a 4% dividend payable July 15, the stockholders on July 1 having the right to subscribe in proportion to their holdings on that date. All of the stock was accordingly issued for cash on July 1.

The profits of the two companies for the six months ended December 31, 1931 were. Company *A*, $35,000.00, Company *B*, $30,000 00.

In addition to the above-stated profits, Company *A* took up its share of the profits of Company *B* as of June 30 and December 31, 1931, and charged Dividends Receivable with all dividends declared by Company *B*.

Each company declared dividends on December 31, 1931, as follows: Company *A*, 6%; Company *B*, 4%.

(a) Prepare a statement of the following accounts:

Company *A*'s books: Investment in Company *B*; Surplus
Company *B*'s books: Capital Stock; Surplus

(b) Consolidated balance sheets were prepared on December 31, 1930; June 30, 1931, July 1, 1931, after issuance of additional stock by Company *B*; and December 31, 1931. What amounts should appear in each of these consolidated balance sheets for Goodwill, Minority Interest, and Consolidated Surplus?

Problem 48-3. Prepare a consolidated balance sheet as of December 31, 1934, from the following data, assuming that there were no Surplus or Deficit accounts at the dates when the intercompany stockholdings were acquired, and that the stock investments are carried at cost.

Balance Sheets—December 31, 1934

	Company *A*	Company *B*	Company *C*
Assets	$100,000 00	$50,000 00	$50,000 00
Investments in *B*			
90%	23,000 00		
5%			1,500 00
Investments in *C*			
85%	22,000 00		
10%		2,700 00	
Deficit		12,250 00	
	$145,000 00	$64,950 00	$51,500 00
Liabilities	$ 50,000 00	$39,950 00	$10,000 00
Capital Stock	75,000 00	25,000 00	25,000 00
Surplus	20,000 00		16,500 00
	$145,000 00	$64,950 00	$51,500 00

Problem 48-4. Company *A*, by a series of purchases, acquired 95% of the stock of Company *B*, as follows:

Date	Per Cent	Cost
Jan 1, 1932	55%	$170,000 00
May 1, 1932	15	85,000 00
Oct 1, 1933	25	140,000 00
Total	95%	$395,000 00

The Surplus account of Company *B* appears as follows:

Balance—Jan 1, 1932		$ 45,000 00
Profits—1932		120,000 00
Dividends—April 1, 1932	$ 16,000 00	
Dividends—November 1, 1932	16,000 00	
Profits—1933		90,000 00
Dividends—June 1, 1933	30,000 00	
Balance—December 31, 1933	193,000 00	
	$255,000 00	$255,000 00

It may be assumed that the profits were earned in equal monthly proportions in the respective years

The balance sheets of the two companies on December 31, 1933, are summarized below:

	Company A	Company B
Current Assets	$ 475,000 00	$250,000 00
Fixed Assets	510,000 00	190,000 00
Investment in Company B	395,000 00	
	$1,380,000 00	$440,000 00
Current Liabilities	$ 230,000 00	$ 47,000 00
Capital Stock	1,000,000 00	200,000 00
Surplus	150,000 00	193,000 00
	$1,380,000 00	$440,000 00

Prepare a consolidated balance sheet as of December 31, 1933

Problem 48-5. Company P acquired 90% of the stock of Company Y and 80% of the stock of Company Z, on January 1, 1934 On March 31, Company P sold 100 shares of Company Y stock at $200 00 per share On September 30, Company P purchased 100 shares of Company Z at $150 00 The Investment accounts have been charged with the cost of stock purchased, and credited with the proceeds of stock sold. No other entries have been made therein. The balance sheets of the three companies on December 31, 1934, were as follows:

	Company P	Company Y	Company Z
Assets			
Cash	$ 15,000	$ 18,000	$ 8,000
Accounts Receivable	45,000	51,000	35,000
Inventories	54,000	63,000	52,000
Fixed Assets—Less Depreciation	97,000	90,000	80,000
Investment in Company Y	115,000		
Investment in Company Z	105,000		
Current Accounts	60,000		
	$491,000	$222,000	$175,000
Liabilities and Net Worth			
Accounts Payable	$127,000	$ 62,000	$ 20,000
Current Accounts		25,000	35,000
Capital Stock			
Company P—3,000 Shares	300,000		
Company Y—1,000 Shares		100,000	
Company Z—1,000 Shares			100,000
Surplus	64,000	35,000	20,000
	$491,000	$222,000	$175,000

The Surplus accounts of the three companies are analyzed as follows:

	Company P	Company Y	Company Z
Balances, December 31, 1933	\$50,000 00	\$30,000 00	\$10,000 00
Profits—1934			
First Quarter	3,000 00	10,000 00	6,000 00
Second Quarter	1,000 00	12,000 00	8,000 00
Third Quarter	16,500 00*	15,000 00	14,000 00
Fourth Quarter	2,000 00	8,000 00	7,000 00
Dividends Paid—December 31	30,000 00*	40,000 00*	25,000 00*
Dividends from Company Y	32,000 00		
Dividends from Company Z	22,500 00		
Balances, December 31, 1934	\$64,000 00	\$35,000 00	\$20,000 00

* Debits

Prepare a consolidated balance sheet as of December 31, 1934.

QUESTIONS AND PROBLEMS ON CHAPTER 49

QUESTIONS

Question 49-1. Company *P* has owned 90% of the stock of Company *S* for several years, and has taken up its share of the subsidiary's profits, losses, and dividends. Its accounts contain the following balances on December 31, 1934:

Investment in Stock of Company *S*	$130,000 00	
Company *S* Profit—1934		$ 13,500 00

Company *S* has $100,000.00 of capital stock outstanding, it had a surplus of $25,000 00 at the beginning of 1933; it made a profit of $15,000.00 during 1934, and paid no dividend during that year. Give the journal entry to be applied in the working papers at the end of 1934, to eliminate the parent company's portion of the capital stock and surplus of the subsidiary. What amounts should appear as goodwill and as minority interest in the consolidated balance sheet?

Question 49-2. Company *P* owns 85% of the stock of Company *S*, which was purchased several years ago. The accounts of Company *P*, on December 31, 1934, contain the following balances

Investment in Stock of Company *S*	$125,000 00	
Company *S* Profit—1934		$ 8,500 00

The accounts of Company *S* contain the following balances:

Capital Stock		$100,000 00
Surplus—December 31, 1933		40,000 00
Dividends Paid—1934	$ 6,000 00	

Give the journal entry to be applied in the working papers to eliminate the parent company's portion of the capital stock and surplus of the subsidiary. What amounts should appear as goodwill and as minority interest in the consolidated balance sheet?

Question 49-3. Company *P* has owned 90% of the $100,000 00 of outstanding stock of Company *S* for several years, Company *S* had a deficit of $5,000 00 at the date of the stock acquisition. The investment is carried on the books of the parent company at cost, $88,000.00.

Company S had a surplus of \$20,000 00 on December 31, 1933, and made a profit of \$5,000.00 during 1934, no dividends were paid by Company S during 1934.

Give the adjusting journal entry to be applied in the working papers to take up the parent company's percentage of the increase in the subsidiary surplus since acquisition, and the entries to eliminate the parent company's percentage of the capital stock and surplus of the subsidiary on December 31, 1934 State the amount of the goodwill and the amount of the minority interest.

Question 49-4. Company P has owned 80% of the \$100,000 00 of outstanding stock of Company S for several years, and is carrying the investment at cost. At the end of 1934, Company P's accounts contain the following balances.

Investment in Stock of Company S	\$100,000 00	
Dividends Received—Company S .		\$ 4,800 00

Company S had a surplus of \$12,000 00 at the date of acquisition, and a surplus of \$4,000 00 on December 31, 1933. Company S lost \$5,000 00 and paid a \$6,000 00 dividend during 1934. Give the adjusting journal entry to take up the parent company's share of the change in subsidiary surplus since the date of acquisition, and the entries to eliminate the parent company's percentage of the capital stock and surplus of the subsidiary. State the amounts of the goodwill and the minority interest.

PROBLEMS

Problem 49-1. The Roosevelt Company owns 88% of the stock of the Penny Company, and takes up its share of the subsidiary's profits, losses, and dividends through its Investment account.

Trial balances of the two companies on December 31, 1933, appear below·

Debits	Roosevelt Company	Penny Company
Cash ...	\$ 44,800 00	\$ 3,950 00
Accounts Receivable .	130,500 00	66,110 00
Penny Company	31,850 00	
Inventory, December 31, 1933.	59,600 00	51,150 00
Land and Buildings	146,500 00	
Machinery and Equipment	85,100 00	103,500 00
Goodwill	39,750 00	
Investment in Penny Company		
Stock.	59,210 00	
Bonds—purchased at par	12,500 00	
Sinking Fund Trustee		5,000 00
Cost of Sales	571,170.00	213,660 00

Selling Expenses	$ 95,190 00	$ 31,150 00
General Expenses	64,500 00	21,000 00
Interest Expense	9,100 00	6,350 00
Loss of Penny Company	3,960 00	
Dividends Paid	20,000 00	3,000 00
	$1,373,730 00	$504,870 00
Credits		
Accounts Payable	$ 63,160 00	60,760 00
Roosevelt Company		14,350 00
Reserve for Depreciation	86,100 00	23,500 00
Bonds Payable	150,000 00	60,000 00
Preferred Stock	100,000 00	
Common Stock	140,000 00	100,000 00
Surplus, January 1, 1933	29,870 00	21,400 00*
Sales	804,600 00	267,660 00
	$1,373,730 00	$504,870 00

*Debit

The $17,500 00 difference in the intercompany accounts results from the following debits on the books of the Roosevelt Company

December 31—Sinking fund deposit made for Penny Company on guaranteed bonds of the latter	$ 5,000 00
December 31—Sale to Penny Company, not received by Penny until 1934 (cost $9,800 00)	12,500 00
Total	$17,500 00

Prepare consolidated working papers and statements

Problem 49-2. The Padway Company acquired 75% of the stock of the Stork Company at 124 on January 1, 1933, and an additional 20% at 126½ on June 30, 1933 The trial balances of the two companies on December 31, 1933, appear as follows.

Debits	Padway Company	Stork Company
Cash	$ 11,800	$ 40,500
Accounts Receivable	61,100	35,000
Notes Receivable	85,000	14,500
Inventory, January 1, 1933.	39,200	29,500
Investment in Stork Company	55,400	
Furniture and Fixtures	16,000	8,700
Purchases	315,700	171,100
Freight In	16,400	11,000
Returned Sales	34,100	12,200
Wages	54,500	34,100
General Expenses	28,000	21,100
Bad Debts	3,500	2,600
Depreciation		900
Interest Paid	2,100	1,000
Dividends Paid (May 1933)		5,000
	$722,800	$387,200

Credits		
Accounts Payable	$ 16,700	$ 21,100
Notes Payable	25,000	
Notes Pay.—Padway Co—Due January 1, 1934		30,000
Notes Receivable Discounted	30,000(2)	10,000(1)
Reserve for Bad Debts	3,000	2,100
Reserve for Depreciation	7,100	4,000
Capital Stock, $100 00 par	100,000	50,000
Surplus, January 1, 1933	29,100	3,100
Sales	510,900	266,900
Interest Earned on Stork Company Notes Paid During the Year	1,000	
	$722,800	$387,200
Inventories, December 31, 1933	$ 42,500	$ 25,000

(1) Discounted with the Padway Company
(2) The note payable of the Stork Company, discounted the day received
Accrued interest on intercompany note, not set up by either company, $400 00

Padway Company recorded no depreciation for the year; rate, 10%.

Assuming that the Stork Company profit has been earned evenly through the year, prepare consolidated working papers, statement of profit and loss, statement of surplus, and balance sheet.

Problem 49-3. On December 31, 1934, the trial balances of Company *A* and its subsidiaries are as follows.

Debits	Company *A*	Company *B*	Company *C*
Cash	$ 50,200	$ 48,800	$ 40,000
Notes Receivable	175,000	40,000	55,000
Accounts Receivable	200,000	290,000	300,000
Raw Material Inv, January 1, 1934	100,000	55,000	110,000
Goods in Process Inv, January 1, 1934	62,000	50,000	58,000
Finished Goods Inv., January 1, 1934	85,000	90,000	75,000
Plant and Equipment	880,000	360,000	390,000
Purchases—Raw Materials	550,000	380,000	450,000
Labor	380,000	350,000	370,000
Expenses—Manufacturing	190,000	175,000	185,000
Expenses—Selling	70,000	60,000	65,000
Expenses—Administrative	30,000	35,000	40,000
Investment—Subsidiary Companies	1,980,000		
	$4,752,200	$1,933,800	$2,138,000
Credits			
Notes Payable	$ 50,000	$ 60,000	$ 75,000
Accounts Payable	85,000	55,000	110,000
Bonds Payable 6's—1939	300,000		
Reserve for Depreciation	93,000	40,000	80,000
Capital Stock	2,000,000	580,000	500,000
Surplus	1,004,200	48,800	163,000
Sales	1,200,000	1,150,000	1,210,000
Service Charges	20,000		
	$4,752,200	$1,933,800	$2,138,000

Companies B and C are owned outright by Company A, which paid $750,000 00 for Company B and $1,230,000 00 for Company C on January 1, 1934. Dividends of 10% were paid by each of the three companies, these dividend entries are the only Surplus entries during the year Company A credited its Surplus for dividends received from Companies B and C.

The service charges taken as income by Company A are included in the manufacturing expenses of Companies B and C

The inventories at December 31, 1934, are as follows·

	Company A	Company B	Company C
Raw Materials	$200,200 00	$60,900 00	$90,800 00
Goods in Process	88,000 00	45,150 00	50,000 00
Finished Goods	77,000 00	73,500 00	80,600 00

The bonds payable were issued July 1, 1934, and the first semiannual interest payment is due January 1, 1935.

In Company B's accounts payable is the sum of $8,000.00 due to Company A, and the sum of $4,000 00 due to Company C.

Prepare the following consolidated statement working papers: cost of goods sold, profit and loss, surplus; balance sheet.

Problem 49-4. The annual report of the Gladiator Corporation for 1933 contains the following statements.

Balance Sheet—December 31, 1933

Assets	
Cash	$ 395,000 00
U S Government Securities	890,000 00
Investment in Valor Company—80%	705,000 00
Advances to Valor Company	150,000 00
	$2,140,000 00
Liabilities and Net Worth	
Collateral Trust Bonds	$ 500,000 00
Capital Stock	1,000,000 00
Surplus	640,000 00
	$2,140,000 00

Statement of Profit and Loss and Surplus
Year Ended December 31, 1933

Profits of Valor Company (Estimated)	$220,000 00	
Less Minority Interest—20%	44,000 00	$ 176,000 00
Interest Earned .		57,000 00
Dividends Received		
Cash		20,000 00
Stock		40,000 00
Total		$ 293,000 00
Expenses		211,000 00
Consolidated Net Profit		$ 82,000 00

Consolidated Net Profit (Brought forward)	$ 82,000 00
Dividends Paid	70,000 00
Increase in Surplus	$ 12,000 00
Surplus, January 1, 1933	628,000 00
Surplus, December 31, 1933	$ 640,000 00

The president's letter in the report contained the following statement: "In past years the investment in Valor Company has been carried at cost, and income taken up only as dividends have been received However, with the purchase of an additional 25% interest on January 1, 1933, we have adopted the policy of taking up a proper share of Valor profits as soon as they are earned. The Valor dividends were taken into income because they represented distributions out of past surplus; future dividends will not appear in the income account. The stock dividend has conservatively been taken into income at par, although its book value is considerably in excess of par"

The general ledger trial balance of Valor Company on December 31, 1933, appears as follows:

Cash	$ 38,000 00	
Inventories	290,000 00	
Fixed Assets—Net	245,000 00	
Goodwill	80,000 00	
Accounts Payable—Gladiator Corporation		$ 143,000 00
Capital Stock—$100 00 par		350,000 00
Surplus	65,000 00	
Sales		980,000 00
Cost of Sales	415,000 00	
Expenses	340,000 00	
	$1,473,000 00	$1,473,000 00

An analysis of the Surplus account reveals the following:

Surplus, January 1, 1933		$120,000
Less		
Discount on Sale of Stock to Gladiator Corporation—750 shares at $20 00	$15,000	
Cash Dividend	25,000	
Stock Dividend	50,000	
Provision to Reduce Inventories December 31, 1933, from cost to market	95,000	185,000
Deficit, December 31, 1933		$ 65,000

You learn that the Valor Company has failed to take up $7,000 00 of interest charged to it by the Gladiator Corporation for the year 1933, and also that the original holding of Valor stock had been acquired by the Gladiator Corporation at book value.

Prepare consolidated statements.

QUESTIONS AND PROBLEMS ON CHAPTER 50

QUESTIONS

Question 50-1. Company *X* acquired 90% of the stock of Company *Y* on January 1, 1932, and 80% of the stock of Company *Z* on January 1, 1933 The inventories of the three companies on December 31, 1932, contained goods purchased from other companies in the group, on which profits had been made as follows:

	Profit Made by		
	Company *X*	Company *Y*	Company *Z*
On goods in inventory of			
Company *X*		$1,500 00	$1,200 00
Company *Y*	$1,000 00		400 00
Company *Z*	2,000 00	1,800 00	
Totals.	$3,000 00	$3,300 00	$1,600 00

What adjustments should be made for intercompany profits in inventories in the consolidated working papers for the year ended December 31, 1933?

Question 50-2. Continuing the preceding question, the intercompany profits in inventories on December 31, 1933, were:

	Profit Made by		
	Company *X*	Company *Y*	Company *Z*
On goods in inventory of:			
Company *X*		$1,900 00	$1,500 00
Company *Y*	$1,200 00		900 00
Company *Z*	2,500 00	2,000 00	
Totals	$3,700 00	$3,900 00	$2,400 00

What adjustments should be made for intercompany profits in inventories in the consolidated working papers for the year ended December 31, 1933?

Question 50-3. Referring to the two preceding questions, what effect will the two adjustments have upon the consolidated net income for the year 1933?

Question 50-4. Company *A* has owned all of the stock of Company *B* for several years. On December 31, 1933, Company *A*

sold Company B certain real estate, as follows.

	Cost to Company A	Selling Price to Company B
Land	$ 20,000 00	$ 30,000 00
Building	100,000 00	120,000 00
Total	$120,000 00	$150,000 00

What reserve for intercompany profit in fixed assets should be created in the consolidated balance sheet of December 31, 1933?

Question 50-5. Continuing the preceding question, during 1934 Company B provided depreciation on the building at the rate of 5% on cost ($120,000.00) What adjustment of the consolidated income for 1934 is required, and what reserve for intercompany profit should appear in the consolidated balance sheet as of December 31, 1934?

PROBLEMS

Problem 50-1. The following statements are prepared on December 31, 1934:

Profit and Loss Statement
Year Ended December 31, 1934

	Company N	Company O
Sales	$400,000 00	$320,000 00
Less Cost of Sales:		
Inventory, January 1, 1934	$ 60,000 00	$ 40,000 00
Purchases	250,000 00	225,000 00
Total	$310,000 00	$265,000 00
Less Inventory, December 31, 1934	60,000 00	25,000 00
Remainder—Cost of Sales	$250,000 00	$240,000 00
Gross Profit on Sales	$150,000 00	$ 80,000 00
Less Expenses	120,000 00	75,000 00
Net Profit on Sales	$ 30,000 00	$ 5,000 00
Other Income	5,000 00	—
Net Profit	$ 35,000 00	$ 5,000 00

Balance Sheet—December 31, 1934

	Company N	Company O
Assets		
Cash	$ 20,000 00	$ 15,000 00
Accounts Receivable	55,000 00	25,000 00
Company O	10,000 00	
Inventory	60,000 00	25,000 00
Investment in Company O—85%	65,000 00	
Land and Buildings—Depreciated Value	55,000 00	30,000 00
	$265,000 00	$ 95,000 00

Liabilities		
Accounts Payable	$ 35,000 00	$ 10,000 00
Company N		10,000 00
Capital Stock	100,000 00	50,000 00
Surplus	130,000 00	25,000 00
	$265,000 00	$ 95,000 00

Company O has sold merchandise to Company N during the past two years, as follows. $50,000 00 during 1934, and $60,000 00 during 1933. The rate of profit during the two years was the same The amount of merchandise in Company N's inventory at the beginning and the end of 1934, at prices as billed by Company O, was $25,000 00 and $35,000 00, respectively.

The "Other Income" in Company N's statement represents a charge to Company O for administration, which has been debited by Company O to Expense

Following is an analysis of the Surplus accounts of the two companies:

	Company N	Company O
Balance, January 1, 1933	$ 47,250 00	$ 5,000 00
Profits, 1933 (Including Dividends)	62,625 00	27,500 00
Total	$109,875 00	$32,500 00
Dividends Paid	7,000 00	10,000 00
Balance, December 31, 1933	$102,875 00	$22,500 00
Profits, 1934 (Including Dividends)	37,125 00	5,000 00
Total	$140,000 00	$27,500 00
Dividends Paid	10,000 00	2,500 00
Balance, December 31, 1934	$130,000 00	$25,000 00

Prepare working papers and consolidated profit and loss statement, surplus statement, and balance sheet, under each of the following conditions:

(a) Stock was acquired on January 1, 1934.
(b) Stock was acquired on January 1, 1933

The parent company carries the investment at cost

Problem 50-2. The trial balances of three affiliated companies on December 31, 1933, before closing, were as follows:

Debits	A	B	C
Cash	$ 62,030 00	$ 95,858 00	$ 80,040 00
Notes Receivable	80,000 00		
Accounts Receivable	165,640 00	160,400 00	124,200 00
Raw Materials, January 1	48,285 00	36,648 00	44,614 00
Goods in Process, January 1	49,625 00	47,600 00	54,717 00
Finished Goods, January 1.	43,650 00	43,819 00	47,480.00

Debits	A	B	C
Investments, at cost			
Company B—100%	660,000 00		
Company C— 90%	650,000 00		
Sinking Fund Trustees	25,000 00		
Plant and Equipment	872,000 00	575,000 00	600,490 00
Discount on Bonds	14,250 00		
Purchases	395,850 00	243,380 00	260,690 00
Labor	225,610 00	175,829 00	195,713 00
Manufacturing Expense	258,450 00	184,372 00	160,440 00
Selling Expenses	99,480 00	75,210 00	82,814 00
General Expenses	92,250 00	49,394 00	54,982 00
Bond Interest	35,000 00		
	$3,777,120 00	$1,687,510 00	$1,706,180 00
Credits			
Notes Payable	$ 50,000 00	$ 80,000 00	
Accounts Payable	54,705 00	49,610 00	$ 57,615 00
First Mortgage Bonds	500,000 00		
Reserve for Depreciation	207,585 00	170,000 00	260,600 00
Capital Stock—$100 00 par	1,500,000 00	500,000 00	500,000 00
Surplus, January 1	208,615 00	107,000 00	135,000 00
Sinking Fund Reserve	25,000 00		
Sales	1,231,215 00	780,900 00	752,965 00
	$3,777,120 00	$1,687,510 00	$1,706,180 00

Subsidiary surpluses at the dates of acquisition were Company *B*, $82,000 00, Company *C*, $150,000 00.

The first mortgage bonds of Company *A* were sold at 97 on January 1, 1932, and matured in twenty years. Annual deposits of $25,000 00 with a sinking fund trustee, and annual sinking fund reserve provisions of $25,000 00, are required

Inventories on December 31, 1933, were as follows:

	A	B	C
Raw Materials	$ 58,790 00	$ 46,290 00	$ 38,260 00
Goods in Process	68,015 00	55,816 00	50,510 00
Finished Goods	38,210 00	36,712 00	48,075 00
Total	$165,015 00	$138,818 00	$136,845 00

The above inventories of Companies *B* and *C* include finished goods purchased from Company *A*, on which the latter company made profits of $4,700.00 and $3,950 00, respectively.

At the close of the year 1933, 10% dividends on capital stock were declared by each company, payable January 15, 1934

The notes payable of Company *B* were given to Company *A* for purchases from that company.

Prepare consolidated statements of operations and surplus, and a consolidated balance sheet Will the consolidated operating statement be true in every respect? Why?

Problem 50-3. Company *X* purchased a 90% interest in the stock of Company *Y* and an 80% interest in the stock of Company *Z*, on January 1, 1933, and June 30, 1934, respectively. Company *Z*'s profits for 1934 are to be regarded as having been earned proportionately through the year The following trial balances were drawn from the books of the three companies on December 31, 1934:

Debits	Company *X*	Company *Y*	Company *Z*
Cash	$ 50,000 00	$ 40,000 00	$ 30,000 00
Accounts Receivable	210,000 00	200,000 00	320,100 00
Notes Receivable	335,000 00	85,000 00	135,000 00
Inventories:			
Raw Materials	80,000 00	60,000 00	90,000 00
Goods in Process	140,000 00	100,000.00	150,000 00
Finished Goods	90,000 00	75,000 00	85,000 00
Investment in Stock of Co *Y*	725,000 00		
Investment in Stock of Co *Z*	1,050,000 00		
Land	60,000 00	20,000 00	35,000 00
Buildings	350,000 00	200,000 00	225,000 00
Machinery	500,000 00	150,000 00	350,000 00
Purchases—Raw Materials	645,000 00	370,000 00	429,900 00
Direct Labor	495,000 00	305,000 00	345,000 00
Manufacturing Expenses	185,000 00	150,000 00	205,000 00
Selling Expenses	95,000 00	35,000 00	60,000 00
General Expenses	40,000 00	20,000 00	60,000 00
	$5,050,000 00	$1,810,000 00	$2,520,000,00
Credits			
Notes Payable	$ 50,000 00	$ 70,000 00	$ 150,000 00
Accounts Payable	60,000 00	65,000 00	100,000 00
Bonds Payable, 6%	500,000 00		
Premium on Bonds	35,000 00		
Reserve for Depreciation			
Buildings	30,000 00	25,000 00	60,000 00
Machinery	65,000 00	35,000 00	60,000 00
Sales	1,480,000 00	1,010,000 00	1,245,000 00
Capital Stock	2,500,000 00	500,000 00	500,000 00
Surplus	330,000 00	105,000 00	405,000 00
	$5,050,000 00	$1,810,000 00	$2,520,000 00

Company *X* has adopted the policy of debiting the investment accounts with subsidiary profits, and crediting them with subsidiary losses and dividends, but has not as yet adjusted the investment accounts for the current year's profits All three companies paid 8% dividends on December 31, 1933, and December 31, 1934.

The bonds of Company *X* were issued on July 1, 1934, and mature in ten years; the first interest coupon is due January 1, 1935.

Allow depreciation at 3% on buildings and 10% on machinery. Intercompany purchases and sales during 1934 aggregated

$380,000 00. Intercompany receivables and payables on December 31, 1934, on open account, amount to $45,000.00, and on notes, $60,000 00

Intercompany profits in inventories are shown below:

	December 31, 1933		December 31, 1934		
	Intercompany Profit		Total	Intercompany Profit	
	Amount	Made by	Value	Amount	Made by
Raw Materials.					
Company *X*	$5,000 00	Co *Y*	$100,000 00	$4,500 00	Co *Y*
Company *Y*	4,000 00	Co *Z*	75,000 00	3,000 00	Co *Z*
Company *Z*	4,000 00	Co *Y*	65,000 00	2,500 00	Co *Y*
Goods in Process					
Company *X*	6,000 00	Co *Y*	125,000 00	6,000 00	Co *Y*
Company *Y*	6,000 00	Co *Z*	140,000 00	7,000 00	Co. *Z*
Company *Z*	5,000 00	Co. *Y*	145,000 00	4,500.00	Co *Y*
Finished Goods.					
Company *X*	4,000 00	Co *Y*	85,000 00	2,000.00	Co *Y*
Company *Y*	2,500 00	Co *Z*	70,000 00	3,500 00	Co. *Z*
Company *Z*	2,500 00	Co *Y*	65,000.00	2,500 00	Co *Y*

Prepare consolidated statements.

Problem 50-4. From the following trial balances and supplementary data, prepare consolidated statements as follows: cost of sales, profit and loss, surplus, and balance sheet.

	Trial Balances December 31, 1935		
	Company *X*	Company *Y*	Company *Z*
Cash	$ 40,650	$ 26,550	$ 35,000
Accounts Receivable	55,000	50,000	70,000
Inventories	100,000	65,000	65,000
Investment in Common Stock			
Company *Y*, 95%	120,000		
Company *Z*, 85%	115,000		
Investment in Preferred Stock.			
Company *Z*, 60%	45,000		
Investment in Bonds			
Company *Y*, 100%	80,000		
Company *Z*, 50%	47,500		
Bldgs and Machinery, Dep'd Value	267,000	235,000	300,000
Bond Discount		3,200	
Raw Material Purchases	408,000	280,000	300,000
Direct Labor	305,000	270,000	240,000
Manufacturing Expense	194,000	190,000	160,000
Depreciation	15,550	19,000	15,000
Selling and General Expense	70,000	50,000	59,600
Bond Interest Expense		4,000	6,000
	$1,862,700	$1,192,750	$1,250,600

	Company X	Company Y	Company Z
Accounts Payable	$ 93,300	$ 62,000	$ 51,500
Bonds Payable—5-year Issues		80,000	100,000
Bond Premium			3,600
Capital Stock			
Common	400,000	50,000	100,000
Non-Participating 7% Preferred	150,000	25,000	75,000
Surplus...	101,200	75,750	45,500
Sales	1,115,000	900,000	875,000
Bond Interest.	3,200		
	$1,862,700	$1,192,750	$1,250,600

Company X's stock investments are carried at cost, and were acquired as follows

Common stock of Company Y, January 1, 1935.
Common stock of Company Z, January 1, 1934
Preferred stock of Company Z, January 1, 1935.

On December 31, 1934, Company X's inventory contained finished goods on which profits had been made by Companies Y and Z in the respective amounts of $2,500.00 and $4,000.00.

The Surplus accounts are analyzed as follows:

	Company X	Company Y	Company Z
Balance, January 1, 1934	$ 84,550	$55,250	$39,900
Dividend from Company Z	5,100		
Net Profit from Operations	60,400	30,000	31,100
Total	$150,050	$85,250	$71,000
Dividends Paid			
Common Stock	$ 24,000	$ 3,000	$ 6,000
Preferred Stock		1,750	5,250
Total	$ 24,000	$ 4,750	$11,250
Balance, December 31, 1934	$126,050	$80,500	$59,750
Dividends Received			
Company Y Common	2,850		
Company Z Common	7,650		
Preferred	3,150		
Discount on Company Y Bonds Purchased	4,000		
Total	$143,700	$80,500	$59,750
Dividends Paid, December 31, 1935			
Common	$ 32,000	$ 3,000	$ 9,000
Preferred	10,500	1,750	5,250
Total	$ 42,500	$ 4,750	$14,250
Balance, December 31, 1935	$101,200	$75,750	$45,500

The accounts receivable and accounts payable include, on December 31, 1935, intercompany accounts as follows.

	Per Books of		
	Company X	Company Y	Company Z
Due from Company Y to Company X	$24,250	$24,250	
Due from Company Z to Company X	16,500		$18,000

Bonds of Company Y were acquired direct from Company Y at 95 on the date of issuance, January 1, 1935.

Bonds of Company Z were issued January 1, 1933, at 106; $50,000.00 par value were acquired by Company X on July 1, 1935, at 95.

Company Y has paid its bond interest for the year; Company Z has paid its interest to outside bondholders and has credited Company X with the interest due that company. This interest has not, however, been taken up by Company X.

Intercompany sales during the year ended December 31, 1935, were:

	To Company		
	X	Y	Z
By Company:			
X		$75,000 00	$30,000 00
Y	$70,000 00		25,000 00
Z	80,000 00	65,000 00	

Summary of Inventories

	Company X	Company Y	Company Z
December 31, 1934			
Raw Materials	$ 40,000 00	$25,000 00	$10,000 00
Goods in Process	25,000 00	25,000 00	20,000 00
Finished Goods	35,000 00	15,000 00	35,000 00
Total	$100,000 00	$65,000 00	$65,000 00
December 31, 1935.			
Raw Materials	$ 35,000 00	$22,000 00	$15,000 00
Goods in Process	30,000 00	17,000 00	20,000 00
Finished Goods	30,000 00	35,000 00	20,000 00
Total	$ 95,000 00	$74,000 00	$55,000 00

Unrealized profit in inventories on December 31, 1935.

	Profit Made by Company		
	X	Y	Z
Raw Materials Inventory of Company Y	$3,500 00		
Goods in Process Inventory of Company Y	3,000 00		
Finished Goods Inventory of Company X		$3,000 00	$3,500 00
Finished Goods Inventory of Company Y	1,000 00	—	1,500 00
Total	$7,500 00	$3,000 00	$5,000 00

Problem 50-5. On March 31, 1934, the general ledger trial balances of three related companies, after all adjustments have been applied, are as follows:

	The Weymouth Company	The Benson Company	The Vending Corporation
Debits			
Cash	\$ 43,500	\$ 94,000	\$ 100,000
Notes Receivable	85,000	250,000	50,000
Accounts Receivable—Customers	135,500	750,000	400,000
Accounts Receivable—Sundry	4,150	25,000	10,000
Inventories—April 1, 1933.			
Finished Goods	310,500	800,000	352,500
Work in Process	45,500	500,000	100,000
Raw Materials and Supplies	105,000	500,000	150,000
Investments			
The Vending Corporation		1,025,050	
The Weymouth Co —Common		345,500	
The Weymouth Co —Preferred		86,000	12,500
Property and Equipment	285,000	2,000,000	400,000
Prepaid Insurance	8,800	25,000	7,500
Labor and Manufacturing Expenses	210,000	918,000	291,200
Purchases	515,000	2,500,000	400,000
Selling Expenses	85,000	400,000	120,000
Administration and General Expenses	35,000	125,000	50,000
Interest Expense	19,600	50,000	15,000
Cash Discounts on Sales	14,500	50,000	15,000
Returned Sales.	44,000	125,000	100,000
Federal Income Tax Provision	6,500	110,000	12,500
Dividends			
Preferred Stock	6,000	70,000	
Common Stock . .	18,000	300,000	50,000
	\$1,976,550	\$11,048,550	\$2,636,200
Credits			
Notes Payable	\$ 203,000	\$ 493,070	\$ 103,650
Accounts Payable	196,300	235,500	175,000
Reserve for Depreciation .	91,500	500,000	250,000
Reserve for Federal Income Taxes	6,500	110,000	12,500
Reserve for Bad Debts	6,800	50,000	7,500
Preferred Capital Stock—Non-participating	100,000	1,000,000	
Common Capital Stock (Par Value \$100 00 per share)	300,000	2,000,000	500,000
Surplus, April 1, 1933	89,500	1,501,800	479,000
Sales . .	980,000	5,000,000	1,100,000
Interest Income ..		25,000	3,700
Cash Discounts on Purchases	10,000	30,000	8,000
Profit and Loss .	7,050*	42,480	3,750*
Income from Investments		60,700	600
	\$1,976,550	\$11,048,550	\$2,636,200

* Debit

The Benson Company owns 80% of the capital stock of The Vending Corporation, and 90% of the common stock and 75% of the preferred stock of the Weymouth Company The Vending Corporation owns 10% of the preferred stock of the Weymouth Company

Inventories on March 31, 1934, are as follows:

	The Weymouth Company	The Benson Company	The Vending Corporation
Finished goods	$280,000 00	$905,000 00	$301,700 00
Work in process	61,450 00	312,500 00	112,000 00
Raw materials and supplies	112,900 00	480,000 00	180,000 00

The Profit and Loss accounts are analyzed as follows.

	The Weymouth Company	The Benson Company	The Vending Corporation
Debits			
Fire loss		$ 1,500 00	
Provision for bad debts	$5,000 00	10,000 00	$5,000 00
Additional Federal income tax for fiscal year 1932	2,050 00	3,290 00	
Total debits	$7,050 00	$14,790 00	$5,000 00
Credits			
Profit on sale of automobile			$ 750 00
Refund of 1930 income tax			500 00
Equity in increase of surplus of subsidiaries during the year			
The Weymouth Company		$20,430 00	
The Vending Corporation		36,840 00	
	—	$57,270 00	$1,250 00

The "equities in increase of surplus" were computed as follows:

	The Weymouth Company	The Vending Corporation
Net profit for the year	$48,750 00	$94,800 00
Surplus charges*—credits in Profit and Loss acct	2,050 00*	1,250 00
Increase in Surplus, before dividends	$46,700 00	$96,050 00
Dividends paid (dividends received have been credited to Income from Investments).		
Preferred	$ 6,000 00	
Common	18,000.00	$50,000 00
Total dividends	$24,000 00	$50,000 00
Increase in Surplus	$22,700 00	$46,050 00
Per cent of common stock owned	90%	80%
Equity in increase of Surplus	$20,430 00	$36,840 00

Included in the sales of The Vending Corporation are sales of \$75,000 00 to The Weymouth Company, of which amount \$2,000 00 were returned; \$15,000.00 of this merchandise, which cost \$11,-150.00 to manufacture, remained in the purchaser's materials inventory on March 31, 1934 Using the alternative form of working papers given in the chapter, prepare the consolidated statements for the year.

QUESTIONS AND PROBLEMS ON CHAPTER 51

QUESTIONS

Question 51-1. Two concerns in similar lines contemplate consolidating their businesses. You are requested to examine their books of account and report on the matters germane to the contemplated merger What data would you probably present in your report?

Question 51-2. In a report upon a proposed amalgamation of two companies, state how you would treat the following points in arriving at the earning power of each concern Give reasons for your treatment:

(a) Anticipated profits on contracts in process
(b) Insurance of any description
(c) Wages paid general workmen
(d) Salaries paid officers and directors
(e) Depreciation of plant and equipment.
(f) Bad debt reserve
(g) Repairs, renewals, and replacement of plant and equipment.

Question 51-3. A client comes to you for assistance in accounting matters involved in the consolidation of five manufacturing companies He informs you that it has been decided that each concern should send him a balance sheet as at the close of its last fiscal year, and profit and loss statements for each of the past five years, so that a preliminary statement may be prepared showing the approximate amount of common and preferred stock of the new corporation to be turned over to each of the five companies in settlement for its net assets, and so forth

The plan outlined for consolidation includes the giving of preferred stock for all tangible assets less liabilities, and common stock for the goodwill based upon past profits. The client asks you to prepare for him a letter to be sent to each of these five companies, requesting such further information as might not ordinarily appear on a balance sheet and Profit and Loss account; all of which information it would be necessary for you to have in order to prepare the preliminary figures referred to above. Outline the information which you would request in such a letter.

Question 51-4. Why is it usually not practicable to effect a consolidation of several companies by issuance of common stock only?

Question 51-5. In a statement of the earnings of a business to be sold on the basis of its earning capacity, how should the question of interest paid on accounts payable, on bills payable, and on loans be treated?

Question 51-6. In the merger of several companies, the following condition is encountered:

Company *A* had borrowed \$50,000.00 from Company *B* and had given notes secured by its capital stock of \$50,000.00. The notes were past due, and Company *A* considered the liability as a sale of capital stock to Company *B*. Company *B* carried the asset as notes receivable. The terms of the merger call for the surrender of stocks in the merging companies for stock in the merged company. The values of the capital stocks of the merging companies were determined by appraisal.

What would be your comments and recommendations in respect to this situation?

Question 51-7. In a balance sheet to be used for financing, to what extent, if any, should an auditor give effect to transactions or developments occurring subsequent to the balance sheet date?

PROBLEMS

Problem 51-1. *X* Corporation desired to obtain control of Corporation *B*, and to that end began buying its common stock wherever it could be found. As a result, the price demanded for the stock advanced to such an extent that, in June 1933, *X* Corporation discontinued this plan of purchase. In the meantime, it had bought 20,000 shares of stock at prices ranging from \$20.00 to \$50.00 and averaging \$36.00. It had also acquired 12,000 shares by an exchange, from its treasury stock, of one half share of *X* preferred and one share of *X* common for each share of *B* stock.

In November 1933, by direct negotiation, the directors of Corporation *B* (who controlled 60% of its stock) agreed to sell *X* Corporation all its assets, except cash, on December 31, 1933, on the following basis:

(1) For sound value of fixed assets, as determined by appraisal, Corporation *B* is to be paid 10% in cash and 90% in preferred stock of *X* Corporation, at par, \$100.00 per share.

(2) For current assets and prepaid expenses, at 90% of book value, Corporation B is to receive cash, less the amount of current liabilities, which are to be assumed by X Corporation

(3) Corporation B is to receive common stock of X Corporation (at par, \$50.00 per share) as payment for goodwill, including all intangibles, the amount to be determined by capitalizing at 20% the average net earnings for the five years 1929 to 1933, inclusive, in excess of \$2.00 per share on 100,000 shares of outstanding stock

In determining such net profits, adjustments are to be made to bring such items as depreciation and capitalization of fixed asset charges in the several years to the basis to be determined by a retrospective appraisal Administrative salaries are to be adjusted to \$24,000.00 for each year in which greater amounts were paid.

An audit carried out before the above settlement adjustments discloses the following facts.

	Net Profits	Administrative Salaries	Depreciation Charges	Net Addition to Fixed Asset Accounts
1929	\$ 81,000 00	\$15,000 00	\$198,000 00	\$ 40,000 00
1930	192,400 00	30,000 00	207,000 00	12,000 00
1931	178,000 00	21,000 00	214,000 00	202,000 00
1932	313,000 00	70,000 00	242,000 00	300,000 00
1933	297,000 00	62,500.00	251,000 00	84,200 00

The audit also discloses that profits had been augmented by gains in sales of fixed assets over depreciated values, as follows:

1931	\$14,100 00
1932	16,800 00
1933	1,300 00

The appraisal report shows the following.

	Proper Additions to Fixed Assets	True Depreciation
1929	\$ 62,000 00	\$ 140,000 00
1930	18,000 00	140,400 00
1931	260,000 00	146,000 00
1932	297,000 00	157,200 00
1933	91,800 00	165,000 00

Reproduction value of fixed assets—Dec 31, 1933	\$6,200,000 00
Depreciation	2,800,000 00
Sound value	\$3,400,000 00

The true depreciation shown by appraisal is presumed to be sufficient to absorb all of the cost of an asset during the years of its use, so that there should be neither profit nor loss at the time of sale or scrapping

The condensed balance sheet of Corporation *B*, December 31, 1933, is as follows:

Assets		
Cash		$ 81,000 00
Receivables		56,000 00
Inventories		574,000 00
Prepaid Expenses		9,000 00
Mortgage Sinking Fund		400,000 00
Plant	$4,000,000 00	
Less Depreciation	2,400,000 00	1,600,000 00
Organization Expense		80,000 00
Patents and Trade-Marks		1,000,000 00
		$3,800,000 00
Liabilities		
Notes and Accounts Payable		$ 200,000 00
Long-term Notes		100,000 00
Mortgage on Plant, Due January 1, 1934		1,000,000 00
Common Stock—100,000 Shares, No Par Value		2,000,000 00
Surplus		500,000 00
		$3,800,000 00

X Corporation has sufficient shares of capital stock, authorized but unissued, to comply with the settlement terms, but to meet the cash requirements it issues 6% gold notes amounting to $1,000,-000 00, which are taken by a syndicate for cash at 96.

After the deal is consummated, Corporation *B* immediately liquidates all liabilities, pays the costs of settlement and liquidation amounting to $20,000.00, and distributes all assets in kind to the stockholders

From the foregoing, you are required to prepare:

(a) A tabulated statement showing the determination of amounts needed for settlement purposes

(b) All journal entries to give effect to the above transactions on the books of Corporation *B*.

(c) All journal entries to give effect to the above transactions on the books of *X* Corporation.

Problem 51-2. In order to consolidate the businesses whose statements appear below, The *X Y* Corporation is organized with the following capitalization·

First Mortgage 5% Bonds—$3,000,000 00
Preferred Stock—$100 00 Par—$5,000,000 00.
Common Stock—$10.00 Par—$1,000,000.00

Balance Sheet—December 31, 1933

	B Co	*D* and *E*	*G* Co
Cash	$ 45,000	$ 58,000	$ 39,000
Accounts Receivable	300,000	410,000	210,000
Inventories	750,000	780,000	300,000
Plant Property	1,400,000	1,010,000	1,440,000
Goodwill			300,000
	$2,495,000	$2,258,000	$2,289,000
Accounts Payable	$ 360,000	$ 465,000	$ 570,000
Accrued Bond Interest	15,000		
Bonds Payable, 6%	500,000		
Reserve for Bad Debts	25,000	24,000	11,000
Reserve for Depreciation	175,000	280,000	102,000
Partners' Capital		1,489,000	
Capital Stock	1,000,000		1,500,000
Surplus	375,000		106,000
Sinking Fund Reserve	45,000		
	$2,495,000	$2,258,000	$2,289,000

Profit and Loss Account, 1933

Sales	$1,550,000	$1,200,000	$ 960,000
Cost of Sales	700,000	580,000	500,000
Gross Profit on Sales	$ 850,000	$ 620,000	$ 460,000
Miscellaneous Income			
Bank Interest	1,000	1,200	600
Profit on Insurance Recovery (Account of Plant Unit Destroyed by Fire)		10,000	
Profit on Sale of Real Estate	15,000		
Total	$ 866,000	$ 631,200	$ 460,600
Deduct			
Management Salaries	$ 80,000	$ 16,000	$ 30,000
Selling and General Expenses	460,000	300,000	280,000
Interest on Bonds	30,000		
Interest on Bills Payable	7,000	14,000	6,000
Sinking Fund Reserve	15,000		
Federal Taxes	51,000	28,500	8,300
Total Deductions	$ 643,000	$ 358,500	$ 324,300
Net Profit	$ 223,000	$ 272,700	$ 136,300

The merger agreement contains the following provisions.

(a) That the net tangible assets shall be paid for on the basis of 20% in cash, 30% in first mortgage bonds, and 50% in preferred stock of the new company.

(b) That the plant property be taken over at appraised sound values on December 31, 1933, as follows.

B Company	$1,200,000 00
D and *E*	1,350,000 00
G Company	1,520,000 00

(c) That allowance be made to the vendors for goodwill, payable in common stock, the amount to be determined thus Two and one-half times the net earnings from operations for the year 1933, before considering any actual interest items (either debit or credit) or Federal taxes, and after fixing management salaries at 4% of the net sales for the year, also after deducting 8% interest on the net tangible assets at December 31, 1933

(d) That the remaining bonds be sold to underwriters at 99, to obtain the cash required for payment to the vendors, and for redemption of the *B* Company bonds, which have been called for redemption on January 1, 1934, at 102½

Assuming that the above transactions are properly carried out, prepare a balance sheet showing the position of The *XY* Corporation as of January 1, 1934. Prepare also statements showing the amount of cash, bonds, preferred stock, and common stock received by each of the vendor companies.

Problem 51-3. The following is the balance sheet of Margo Manufacturing Company as at December 31, 1933:

Assets		
Current		
Cash in Banks and on Hand		$ 50,000
Customers' Notes and Accounts Receivable, Less Reserve		300,000
Inventories		1,000,000
Total Current Assets		$1,350,000
Land, Bldgs, and Machinery, as appraised, Less Res for Dep'n		6,200,000
Prepaid Expenses.		20,000
Goodwill		1,000,000
		$8,570,000
Liabilities		
Current		
Notes Payable—Banks		$ 800,000
Trade Acceptances		400,000
Accounts Payable and Accrued Expenses		500,000
Total Current Liabilities		$1,700,000
Funded Debt:		
First Mortgage 6½% Gold Bonds	$2,100,000	
Serial Gold Notes.	400,000	2,500,000
Capital Stock—Authorized and Issued		
Preferred, 20,000 Shares 6% Cumulative, Par Value $100 00 each	$2,000,000	
Common, 15,000 Shares, Par Value $100 00 each	1,500,000	3,500,000
Surplus		
Earned	$ 70,000	
From Appraisal of Plant . . .	800,000	870,000
		$8,570,000

In order to provide the working capital necessary for the continuance of the business, it is proposed to reorganize according to the following plan:

(1) The authorized capital stock to consist of 50,000 shares of 6% cumulative preferred of a par value of $50 00 a share, and 100,000 shares of no-par common
(2) The preferred and common stock now outstanding to be surrendered, the present stockholders to receive, for each share of preferred stock now held, one share of new preferred of $50 00 par, one share of no-par common, with warrant entitling to purchase, on or before June 1, 1937, one-half share of no-par common at $35 00 a share; for each share of common stock now held, two shares of no-par common with warrant entitling to purchase, on or before June 1, 1937, one-half share of no-par common at $35.00 per share
(3) One of the branch plants to be sold for a cash consideration of $600,000 00, and the serial gold notes of $400,000.00, which are secured by a mortgage on this plant, to be paid The plant to be sold is carried on the books and included in the fixed assets at $750,000 00, the appraised value less depreciation.
(4) $1,250,000.00 of 7% debentures to be issued and sold at 95, the sale carrying with it a bonus of 5,000 shares of no-par common stock
(5) The proceeds of the proposed financing to be applied to reduce bank loans, trade acceptances, and accounts payable by $600,000 00, $350,000 00, and $400,000 00, respectively, and to increase the cash balance
(6) By resolution of the directors, all Surplus accounts to be closed and their balances merged, after the goodwill has been written off, in the stated value of the no-par common stock

Prepare a balance sheet, as of December 31, 1933, after giving effect to the transactions set forth in the foregoing plan of reorganization.

Problem 51-4. The directors of five corporations, all situated in the same state, desire to consolidate. With that end in view they draw up and sign an agreement to be submitted to all stockholders of record, setting forth the plan of the proposed consolidation and stating its purposes and advantages

You are called upon to audit the books of account and records

of the five companies and to present a certified balance sheet showing the book value of the capital stock of each company You are then to prepare a schedule showing how much stock of the new corporation should be issued in payment for the stock of each of the companies about to be consolidated

You are next required to prepare a balance sheet giving effect to the consolidation, after it has been unanimously approved by the several companies

The result of your audit of the individual companies, as of January 1, 1929, accepted by the several boards of directors, was as follows.

	Carter Yarn Co	Atlas Mills	Ladd Cotton Mills	Reliable Finishing Co	Excelsior Print Works
Assets					
Cash .	$ 3,198	$ 167,071	$ 54,316	$ 8,464	$ 7,800
Inventories	402,649	376,476	384,627	32,904	265,644
Fuel and Supplies	17,270	18,759	20,241	2,876	14,290
Accts Receivable·					
Selling Agents	24,756	130,974	42,420		
Others	2,200	55,402	2,125	98	10,456
Mill Store Account			17,846		
Ins Unexpired	2,500	4,250	16,241	387	564
Interest Accrued	1,451	2,341	1,298	963	1,400
Property and Plant	950,000	1,054,674	1,265,455	175,602	141,750
Other Real Estate	75,000		24,000		
Investments—at cost; detailed below .	25,000		655,810		
	$1,504,024	$1,809,947	$2,484,379	$221,294	$441,904
Liabilities					
Notes Payable	$ 175,000	$ 300,000	$ 75,000	$ 62,850	$110,000
Accounts Payable		3,675	22,380	8,444	121,864
Wages Accrued			5,437		2,675
Reserves for 1928 Income Taxes		14,645	16,245		14,475
Res for Dep'n	650,000	452,853	928,332		30,743
Surplus	179,024	38,774	486,223		62,147
Profit for Previous Six Months			450,762		
Capital Stock—Common	500,000	1,000,000	500,000	150,000	100,000
	$1,504,024	$1,809,947	$2,484,379	$221,294	$441,904

Carter Yarn Co. owns 250 shares of capital stock of Excelsior Print Works, and Ladd Cotton Mills owns 11,260 shares of Atlas Mills

The capital stock of the companies is stated on the following page.

	Shares	Par Value
Carter Yarn Co	25,000	$ 20 00
Atlas Mills	20,000	50 00
Ladd Cotton Mills	5,000	100 00
Reliable Finishing Co	1,500	100 00
Excelsior Print Works	1,000	100 00

The new corporation is organized under the name of the Carter Ladd Corporation, with an authorized capital stock of 75,000 shares, par value $100.00 each

Reliable Finishing Co. and Excelsior Print Works are taken into the merger at 100% of their net worth per books, exclusive of intercompany stockholdings, and the other three companies, at 80% This is to be computed to the nearest whole number of shares and the balance applied to surplus In determining the final distribution of Carter Ladd Corporation stock, proper recognition is to be given to intercompany stockholdings

Problem 51-5. Two companies propose to consolidate; their balance sheets appear as follows

	Company *X*	Company *Y*
Current Assets	$ 95,000 00	$ 45,000 00
Investment in Stock of Company *X*—250 shares		50,000 00
Fixed Assets (appraised values)	110,000 00	120,000 00
	$205,000 00	$215,000 00
Current Liabilities	$ 25,000 00	$ 35,000 00
Fixed Liabilities	50,000 00	40,000 00
Capital Stock (1,000 shares each)	50,000 00	100,000 00
Surplus	80,000 00	40,000 00
	$205,000 00	$215,000 00

Company *Z* is organized to acquire the old companies by issuance of common stock on the basis of net asset values No consideration is to be given to earnings, but the two companies are to be regarded as having equal goodwills

Give two solutions, showing how much of the Company *Z* stock should be issued to each old company for distribution to its stockholders. In each case submit a balance sheet of Company *Z* after the merger, assuming that the old companies are dissolved

QUESTIONS AND PROBLEMS ON CHAPTER 52

QUESTIONS

Question 52-1. If two countries are on a gold basis, what may affect the par rate between the two countries?

Question 52-2. If one country is on a gold basis and one is on a silver basis, what additional factor may change the mint par rate?

Question 52-3. Does the change in the balance of trade between two countries have any effect upon the mint par rate?

Question 52-4. What is meant by specie points or gold points?

Question 52-5. What factors influence the rise and fall in the current exchange rates?

Question 52-6. What is meant by a banker's bill? By a commercial bill? Distinguish between a short bill and a long bill; between a documentary bill and a clean bill.

PROBLEMS

Problem 52-1. (1) Make the following conversions at par rates:

(a) $8,625 00 to pounds.
(b) $8,080 00 to francs
(c) 5,500 marks to dollars
(d) £350 10s 6d to dollars

(2) Convert $25,000 00 at the following rates (value in cents). quoted as current as of April 20, 1934:

(a) London cables, 516 608.
(b) London checks, 516 21.
(c) Paris cables, 6 647.
(d) Paris checks, 6 64
(e) German checks, 39.58

(3) Convert 25,000 units of the respective foreign moneys to dollars at the rates in (2)

Problem 52-2. Compute the interest on £605 12s 6d. for

85 days at 6%, using: (a) 360 days to the year; and (b) 365 days to the year

Problem 52-3. The following is a summary of the account of a bank with its London correspondent during January:

Date	Debits
1—Balance, £600 at 5 18	
4—Remittance, 30-day bill, £75 10s. at 5 165	
10—Remittance, sight bill, £100 15s 6d at 5 192	
24—Cable, £200 at 5 17	
	Credits
3—Draft, sight, £500 at 5 185	
15—Draft, demand, \$6,475 00 at 5 18	
29—Cable, £100 at 5 155	

Set up the account as it should appear on the books of the bank after closing, January 31, ignoring interest The current rate on January 31 is 5 14

Problem 52-4. *A* in London, in current account with *B* of New York, engages an accountant to prepare a statement, to be mailed to *B*, from the following data.

	Debits		
May 12		£750	
May 30		117	
June 12		340	
July 1		150	
Total debits			£1,357
	Credits		
June 10		£500	
June 30		300	
Total credits			800
Balance			£ 557

Find the average due date of the account and the interest at 5% to July 1, considering 365 days to the year. State the interest in pounds, shillings, and pence

Problem 52-5. A. B. Crow made the following sales to Thorne & Sons of Paris.

Date	Amount	Exchange Rate at Date of Sale
May 5	\$2,500 00	6 64
July 1	5,000 00	6 60
August 28	6,000 00	6 685

Thorne & Sons paid the entire bill by cable transfer on September 10, at which date the rate was 6 725

Make entries in journal form and also show the personal accounts as they would appear on the books of both parties, assuming that:

(a) Billings were in United States money
(b) Billings were in French money on the basis of the rates prevailing at the dates of shipment.

Assume no changes in rates between dates of shipment and arrival of goods, and between making and receiving remittance

Problem 52-6. From the following data, prepare entries for the corporation's books, to record all exchange transactions, the exchange position, and profits realized. Show also what the result would have been if the exchange risk had not been covered.

A United States corporation with a branch in a foreign country ships raw material to this branch, in which a certain product is manufactured and sold The branch remits the net proceeds as soon as the sales are realized in cash

The unit of this foreign currency is the crown, worth sixty cents at par of exchange

When it appears that the rate of exchange may decline, the United States corporation guards against losses by selling forward the foreign currency to be collected For this reason and purpose, the branch costs and expenses, as well as the proceeds from its sales, must necessarily be determined as nearly as possible in advance

On October 1, when the crown was selling at 30, the United States corporation shipped raw material costing $30,000 00 and billed the branch for the equivalent of 100,000 crowns, payable December 30

It was estimated that all manufacturing, selling, administration, and other branch expenses applicable to this venture would be 120,000 crowns and that the product would be all sold by December 30 for 250,000 crowns The estimate proved to be correct, with one exception: *viz.*, the goods were actually sold and delivered by December 30 for 255,000 crowns, spot cash, f o b factory

The rate of exchange had, in the meantime, fallen to 20.

Problem 52-7. An English investor is offered a 6%, three-year, £5,000 bond on a 5% basis Compute the price, and set up a table showing the collection of the income and the amortization of the premium. The present value of 1 at 2½% for 6 periods is 8622969

QUESTIONS AND PROBLEMS ON CHAPTER 53

QUESTIONS

Question 53-1. How would an American importer record the purchase of merchandise in Europe if payment is not to be made for sixty days and the goods are billed in dollars? In pounds? What entry would he make to record the subsequent payment in case the rate of exchange had changed between the date of purchase and the date of payment?

Question 53-2. If cash is remitted by a foreign branch to the home office, payable in foreign currency, how should the transaction be recorded on the two sets of books, and what rate of exchange should govern the conversion?

If the remittance was payable in dollars, what entries would be made on the two sets of books, and what rate would govern the conversion?

Question 53-3. What entries should be made on the two sets of books to record goods sent by the home office to the foreign branch, and what exchange rate should be used for the conversion?

Question 53-4. Assuming that fixed asset accounts are kept on the foreign branch books, how would the branch record a purchase of fixed assets paid for in foreign currency?

How would the branch and the home office record a shipment of machinery from the home office to the branch?

Why is it desirable to keep the branch fixed asset accounts on the home office books? If the fixed asset accounts are kept on the home office books, what entries should be made to record a shipment of machinery by the home office to the branch? What entries would be made to record the acquisition of fixed assets by the branch, paid for in foreign currency?

Question 53-5. At what rate should foreign branch current assets be converted, and what is the reason for its use? What rate should be used for conversion of current liabilities? Why? At what rate should fixed assets be converted?

What rate should be used in converting the inventory at the beginning of the period? What rate should be used for conversion of the balances of the nominal accounts?

PROBLEMS

Problem 53-1. The Soochow Company opened a branch in Liverpool on January 1, 1934 Its transactions with the branch and the branch's own transactions during 1934 are summarized as follows.

(a) Remittances to the branch.
  Draft for £2,000, purchased at 5 17.
  Draft for $5,000.00, cashed by the branch at 5.18
(b) Shipments to the branch:
  Merchandise costing $45,000 00, taken up by the branch at 5.18.
  Merchandise costing $65,000.00, taken up by the branch at 5 20.
(c) Sales by the branch:
  On account, £12,000.
  For cash, £8,000.
(d) Collections by the branch on account, £11,500.
(e) Branch fixed asset acquisitions (fixed asset accounts kept on branch books)
  Purchased by home office for cash, $2,000 00, rate, 5.17.
  Purchased by branch for cash, £2,600, rate 5 20.
(f) Branch expenses·
  Paid in cash, £1,750.
  Not paid, £450.
(g) Cash remitted to home office:
  Draft for £5,000, cashed by home office at 5.195.
  Draft for $50,000 00, purchased at 5 18.
(h) Depreciation provided by branch, 10%.
(i) Branch inventory, December 31, 1934, £7,500

Make such entries as should appear on the books of the home office and the branch to record the foregoing transactions; close the branch books; prepare the branch profit and loss statement and balance sheet in both currencies; make an entry on the home office books taking up the branch profit; and prepare a statement of the current accounts as they should appear on the two sets of books after closing.

The average rate is 5 185, the current rate, December 31, 1934, 5.21.

Problem 53-2. The trial balance of the London branch of the Speaker Company on December 31, 1934, is shown on the following page.

Cash	£ 7,000	
Accounts Receivable	13,000	
Remittance Account	80,000	
Merchandise Inventory—January 1, 1934	8,000	
Furniture and Fixtures	5,000	
Accounts Payable.		£ 1,000
Home Office Current Account		94,000
Sales		85,000
Merchandise from Home Office (at cost)	58,000	
Expenses	9,000	
	£180,000	£180,000

Inventory, December 31, 1934, £8,000
Assume the following exchange rates:

On the date the furniture and fixtures were purchased, 4.83.
On January 1, 1934, 5 12
Average rate for the year, 5.20.
On December 31, 1934, 5 14.

The trial balance of the home office books on December 31, 1934, was:

Cash	$ 26,090	
Accounts Receivable	39,800	
Raw Material Inventory—December 31, 1934	35,000	
Goods in Process Inventory—December 31, 1934	15,000	
Finished Goods Inventory—December 31, 1934	38,000	
London Branch Current Account	481,510	
Land	10,000	
Plant and Equipment	140,000	
Reserve for Depreciation		$ 42,000
Reserve for Depreciation—London Furniture and Fixtures		10,900
Accounts Payable		18,000
Remittances from London Branch		414,000
Reserve for Exchange Fluctuations		2,100
Capital Stock		200,000
Surplus		85,500
Profit and Loss—1934		15,900
	$788,400	$788,400

From the foregoing information, prepare:

(a) Closing entries on the branch books

(b) Statement converting the branch trial balance and December 31, 1934, inventory to the dollar values at which the various items should appear in the statements.

(c) Branch profit and loss statement for the year, from facts shown on the branch books, expressed in both pounds and dollars

(d) Branch balance sheet, expressed in both pounds and dollars.

(e) Journal entries on the home office books, taking up the

branch profit and closing the books, and allowing $3,000.00 depreciation on the branch furniture and fixtures.

(f) Transcript of the London Branch Current account on the home office books

(g) Combined balance sheet working papers.

Problem 53-3. A New York corporation builds a plant and establishes a branch in Liverpool, England At the expiration of its fiscal period a trial balance is forwarded to the New York office, as follows

Cash	£ 12,500	
Accounts Receivable	187,500	
Remittance Account	150,000	
Inventory (end of fiscal period)	50,000	
Plant (rate at acquisition, 4 88)	250,000	
Accounts Payable		£ 87,500
New York Office		337,500
Income from Sales		250,000
Expenses	25,000	
	£675,000	£675,000

A trial balance of the New York books at the same date was as follows:

Cash	$ 107,625 00	
Liverpool Account	1,640,250 00	
Patents	2,500,000 00	
Remittance Account		$ 772,875 00
Capital Stock		3,500,000 00
Expenses	25,000 00	
	$4,272,875 00	$4,272,875 00

The Remittance account is composed of four sixty-day drafts on Liverpool for £37,500 each, which were sold in New York at $5.18, $5 165, $5 145, and $5.12, respectively

Prepare a balance sheet of the New York books after closing, a statement of the assets and liabilities of the Liverpool branch reconciled with the New York books, and combined balance sheet working papers. The rate of exchange on the last day of the fiscal period was 5.10. Any exchange profit or loss may be taken into Surplus.

Problem 53-4. The following is the trial balance of The Farewell Company on December 31, 1934.

Cash	$ 36,600 00
Accounts Receivable	351,500 00
Inventories—January 1	67,500 00
Plant and Equipment	217,800 00

Reserve for Depreciation		$ 86,000 00
Accounts Payable		69,000 00
Notes Payable		140,000 00
Capital Stock		300,000 00
Surplus		91,940 00
Sales		905,000 00
Purchases	$ 410,000 00	
Direct Labor	144,000 00	
Manufacturing Expenses	110,000 00	
Selling and General Expenses	199,500 00	
Paris Expense	40,284 00	
Exporting Expense—1934 Shipments	14,756 00	
	$1,591,940 00	$1,591,940 00

Inventories—December 31—$98,000 00

The accounts receivable include an account called Paris Office, of which you make the following analysis:

Balance—January 1, 1934		$ 85,200 00
Sales (including $12,000 00 in transit on December 31, 1934)		233,800 00
Total		$319,000 00
Credits		
Cash	$106,560 00	
Commission to Manager	11,840 00	
Insurance Recovery*	11,000 00	129,400 00
Balance—December 31, 1934		$189,600 00

* Collection from insurance company at billed price for merchandise lost; the insurance company paid all transportation charges direct to the carrier.

You learn that the Paris office is a branch, to which merchandise is billed at domestic selling prices, to be resold at a mark-up of 20%. The 1934 French selling prices were fixed on January 1, on the basis of the exchange rate then prevailing—.062. The branch was established early in 1933, when the manager was sent abroad with a draft for 125,000 francs, purchased for $5,000 00. With this draft the manager opened an account in Bank *A*, against which he draws checks in payment of *all* expenses applying to the foreign business (except his commission), the home office replenishes the fund for the amount of these expenses, as reported, by cable transfers of francs to Bank *A*, and records the dollar cost thereof as Exporting Expense (ocean freight, insurance, and duty) or as Paris Expense (all other items).

When he makes collections on sales, the Paris manager deposits the cash in Bank *B*, and immediately withdraws his 10% commission, the home office draws against this balance when exchange rates are favorable Withdrawals are recorded as follows:

Debits: Cash (for dollars received).

Paris Expense (1/9 of cash debit, for commissions applicable)

Credit: Paris Office (for total)

On December 31, 1934, the following figures, taken from its memorandum records, are submitted by the Paris office:

Bank balances. *A*, 125,000 francs, *B*, 45,000 francs
The reconciliations indicate that no checks were outstanding at the beginning or end of the year
Inventory, at billed price, \$50,220.00 (The inventory on January 1, 1934, was \$40,920.00)
Accounts receivable, 3,100,000 francs

Bank statements for the year show totals as follows:

A. Deposits, 675,000 francs; withdrawals, 645,000 francs
B Deposits, 1,900,000 francs, withdrawals, 1,855,000 francs.

The rate of exchange on December 31, 1934, was .0675

You find that the Paris expense payments for the year include 110,000 francs as rent for the period from January 1, 1934, to November 1, 1935; also that the French income tax for 1934 will be 60,000 francs.

Prepare entries to adjust the books of The Farewell Company, a statement of profit and loss for the year, and a balance sheet at the end of the year Gross profits and selling prices in the United States were constant in 1933 and 1934. Do not allow the change in the exchange rate during the year to affect the branch gross profit. Convert all expenses at the average rate. Make all computations to the nearest dollar.

The management acknowledges that it is not properly accounting for its foreign business, but maintains that it is being conservative by not taking up the foreign sales until the cash is received

QUESTIONS AND PROBLEMS ON CHAPTER 54

QUESTIONS

Question 54-1. Can you see any objections to handling the accounts of a foreign manufacturing branch as follows. When dollars are sent to the foreign factory, charge the Factory Current account with the amount of the remittance and allow the factory to take up the cash at the foreign value obtained in cashing the draft. Keep the Cash and other accounts in foreign currency only, and, when finished goods are shipped to the home office, allow the home office to convert the finished goods from the cost, as shown by the factory's books, to dollars, at the rate current at the time of receiving the goods

Question 54-2. Is there any reason why current liabilities of a foreign factory should not be converted for balance sheet purposes at the rate current at the date of the balance sheet?

Question 54-3. Assume that a parent company sells goods to, or purchases goods from, its foreign subsidiary, payable in dollars. Explain how the parent company's and the subsidiary company's current accounts would be kept, state what exchange adjustment might be necessary at the time of settling for the goods, and explain on which set of books such exchange adjustment would be made

Question 54-4. In the case of a foreign branch, it is advisable to keep the fixed asset accounts on the home office books. This is, of course, impossible in the case of a foreign subsidiary. How would you recommend that the subsidiary's fixed asset accounts be kept?

Question 54-5. When the foreign subsidiary's balance sheet is being consolidated with the parent company's balance sheet, how should the foreign company's Capital Stock account be converted? How should the foreign subsidiary's Surplus account be converted?

Question 54-6. Assume that the parent company follows the method of taking up its share of the foreign subsidiary's profits and recording dividends through the Investment account How would a dollar value of such profits and dividends be determined, and what

entries would be made to record them?

Question 54-7. Assume that the parent company does not own all of the foreign subsidiary's stock How would you determine the dollar value of the minority interest for purposes of a consolidated balance sheet?

PROBLEMS

Problem 54-1. The Pan-American Chemical Company, a New York corporation, owns a plant in Chíle, in which nitrate of soda is manufactured and shipped to the United States. The accounts in Chile are kept in dollars and in the local currency (pesos) The following is a summary of the transactions during a certain year:

January 1—New York remitted by telegraphic transfer $30,000.00, which realized 120,000 pesos
April 1—New York remitted $30,000 00, which realized 150,000 pesos.
July 1—New York remitted $30,000 00, which realized 180,000 pesos.
October 1—New York remitted $30,000 00, which realized 150,000 pesos

Wage payments:

For plant construction, 120,000 pesos.
For operating, 300,000 pesos

At December 31, the unpaid payroll for operating labor amounted to 60,000 pesos, and one sixth of the nitrate produced during the year remained in inventory

You may assume that the production, construction, and shipments were distributed evenly over the twelve months, and that the only element entering into costs of production and construction in Chile was labor.

The average quoted exchange rates in Chile and New York were as follows:

Jan 1 to June 30.	3 pesos = $1 00
July 1 to Dec 31	5 pesos = $1 00

At the close of business, December 31, the rate suddenly dropped to 6 pesos = $1 00

You are required to show the accounts on the branch books in both pesos and American dollars, and to prepare a trial balance as at December 31, for the purpose of incorporating the Chilean accounts on the New York books

Problem 54-2. The Hull Company organized a corporation in England with £25,000 capital stock, for which it remitted at 4 70 Profits, losses, and dividends of the subsidiary have been taken up through the Investment account Dividends received in 1933 were so taken up, but no entries were made on the parent company's books for the profits of 1933

The following trial balances were taken from the two sets of books on December 31, 1933:

	Hull Company		England Company	
Cash	$ 24,350		£ 10,000	
Accounts Receivable	240,000		6,000	
Intercompany Current Accounts	56,600			£ 10,800
Inventories—Dec 31, 1932				
Raw Materials	40,000			
Goods in Process	55,000			
Finished Goods	35,000		4,200	
Investment in England Co Stk.	114,000			
Plant and Property—Net	240,000		26,000	
Accounts Payable		$ 95,000		500
Capital Stock		500,000		25,000
Surplus		129,000	800	
Sales		1,010,000		80,000
Purchases	328,200		50,500	
Direct Labor	300,000			
Manufacturing Expenses	225,850			
Selling and General Expenses	75,000		19,000	
Exchange				200
	$1,734,000	$1,734,000	£116,500	£116,500
Inventories—December 31, 1933				
Raw Materials		$ 30,000		
Goods in Process		70,000		
Finished Goods		42,000		£7,000

The foreign subsidiary obtains all its merchandise from the parent company, which has always billed the subsidiary at cost plus 25%, payable in dollars. Billings during 1933 amounted to $262,600 00, which figure may be used as the basis for computing the average rate for the year. Assume the following exchange rates:

On date of acquisition of foreign plant	4 80
On December 31, 1932	5 12
On December 31, 1933	5 18

Depreciation for the year has been provided as follows:

Hull Company	$40,000
England Company	£ 2,000

Both companies paid 6% dividends during the year.

From the foregoing data prepare:

(1) Entries to close the subsidiary's books
(2) Entries to close the parent company's books
(3) Working papers for the preparation of the consolidated statements

The Hull Company has followed the practice of taking profits or losses on the conversion of the subsidiary's trial balance into current operations

Problem 54-3. In the course of an examination of the accounts of an American corporation having two foreign subsidiaries (the accounts of which are to be consolidated with those of the parent company), you are given the following comparative balance sheets of the two companies, one in Great Britain, the other in France.

GLADSTONE COMPANY

	December 31	January 1
Assets		
Current Assets	£27,000	£19,500
Fixed Assets*	5,000	4,500
Deferred Charges	1,000	1,000
	£33,000	£25,000
Liabilities and Net Worth		
Current Liabilities	£21,000	£ 8,000
Capital Stock	5,000	5,000
Surplus	7,000	12,000
	£33,000	£25,000

The investment in the capital stock of the British company is carried on the books of the main office at $28,800 00, representing the dollar cost thereof at the date of incorporation The rate of exchange on January 1 was 4 90 and on December 31, it was 5 20

MARNE COMPANY

	December 31	January 1
Assets		
Current Assets	frs 130,000	frs 220,000
Fixed Assets*	550,000	475,000
	frs 680,000	frs 695,000
Liabilities		
Current Liabilities	frs 40,000	frs 90,000
Capital Stock	600,000	600,000
Surplus	40,000	5,000
	frs 680,000	frs 695,000

* No additions to fixed assets were made from the date of incorporation—January 1 of the current year

The investment in the capital stock of the French company is carried on the books of the main office at $90,000.00, representing

the dollar investment at the date of incorporation. The rate of exchange on December 31 was \$.04 and on January 1, \$ 044

The current liabilities of the British company include £2,000, and those of the French company, 15,000 francs, due to the main office at both dates.

The treasurer of the company proposes to convert each item on the December 31 balance sheet at the rate of exchange current at that date and to use these figures in preparing the consolidated balance sheet. The difference between the value at which the capital stock of the foreign subsidiaries is carried on the books of the main office and the net worth thus determined is to be thrown into Goodwill.

Criticize or justify the proposed method of handling these accounts Explain and illustrate a preferable method, showing the differences in results

Problem 54-4. The Products Company, Ltd , Canada, keeps its records on a nominal dollar basis, and presents the following balance sheet as at December 31, 1930:

Assets		
Cash		\$ 10,000 00
Accounts Receivable		300,000 00
Inventories		250,000 00
Fixed Assets (U S dollar cost at date of acquisition)		100 000 00
		\$660,000 00
Liabilities		
Notes Payable		\$ 15,000 00
Accounts Payable		150,000 00
Due to Parent Company (U S dollars)		200,000 00
Capital (U S Dollars)		150,000.00
Surplus		
Beginning of year (U. S dollars)	\$ 25,000 00	
Profit for year	120,000 00	145,000 00
		\$660,000 00

You are requested to convert this statement to a United States currency basis for consolidation with the parent company's balance sheet Assume that the Canadian dollar is worth \$ 80 in United States funds Explain your treatment of each item

The following information is available:

Accounts Receivable—all Canadian funds.

Notes Payable—all Canadian funds.

Accounts Payable—\$30,000 00 payable in Canadian funds, and \$120,000 00, in United States funds

Inventories:

Raw material purchased in Canadian funds \$ 20,000.00

Raw material purchased in United States funds. 100,000.00
Goods in process 130,000 00

This item includes material purchased both in the United States and Canada, with all the labor performed in Canada. The total purchases for the year average, approximately, 85% from the United States and 15% from Canada. The labor cost approximates 13% of the cost of materials. No overhead is included in the inventory valuation.

Assume no intercompany profit on materials purchased from the parent company.

Problem 54-5. The Arlington Silk Mills incorporated a selling company in France, as of January 1, 1926, to take over the assets and liabilities of their Paris office. The opening balance sheet of the French Company is as follows:

Assets	
Cash	frs 134,000
Accounts Receivable	680,000
Merchandise (at invoice price, plus freight charges, etc)	1,050,000
Furniture and Fixtures	40,000
	frs 1,904,000
Liabilities	
Accounts Payable	frs 23,800
Arlington Silk Mills—Current account	1,780,200
Capital Stock	100,000
	frs 1,904,000

The exchange rate on January 1, 1926, was 3 70 cents to the franc. During the year, merchandise costing $160,000.00 was shipped by the Arlington Silk Mills and billed at 10% above cost, and remittances amounting to 5,000,000 francs were made by the French company The details were as follows:

Merchandise Invoiced		Remittances	
1/16	$ 30,000 @ 0373	2/20	frs 500,000 @ 0356
3/27	20,000 @ 0342	6/12	1,000,000 @ 0287
5/6	50,000 @ 0324	7/10	800,000 @ 0254
8/14	40,000 @ .0275	8/28	1,000,000 @ 0284
10/16	36,000 @ .0286	11/27	700,000 @ 0360
		12/12	1,000,000 @ 0379
	$176,000		frs 5,000,000

The trial balance of the French company on December 31, 1926, forwarded to the American company, appears on the following page.

Sales			frs	7,730,000 00
Merchandise Purchases	frs.	5,645,581 46		
Merchandise Inventory		1,050,000 00		
Freight Charges		580,000 00		
Warehouse Charges		213,000 00		
Salaries		474,000 00		
General Expenses		306,000 00		
Selling Expenses		117,000 00		
Accounts Receivable		1,610,000 00		
Cash		284,000 00		
Furniture and Fixtures		50,000 00		
Accounts Payable				73,800 00
Arlington Silk Mills				2,425,781 46
Capital Stock				100,000 00
	frs.	10,329,581 46	frs	10,329,581 46

The inventory at the end of the year amounted to 1,412,000 francs, which amount included freight and other charges amounting to 140,000 francs, the exchange rate at that date being 3 90 cents to the franc

Prepare a balance sheet and profit and loss statement, in dollars, for consolidation with the accounts of the American company, and submit the journal entries required on the books of the latter company.

QUESTIONS AND PROBLEMS ON CHAPTER 55

QUESTIONS

Question 55-1. What is the distinction between a devisee and a legatee?

Question 55-2. A will provides that a son shall be given a watch Is this a specific legacy?

What is a demonstrative legacy? What is a residuary legacy?

Question 55-3. Define corpus and income, and state why the distinction is maintained in the accounts of a decedent's estate

Question 55-4. When are dividends, interest, and rents treated as principal?

Question 55-5. Under what circumstances should a trustee amortize bond premiums by a charge against income, and under what circumstances should the loss of such premiums be charged against principal?

Question 55-6. What disposition should be made by a trustee of an amount received by him for the sale of the rights to subscribe to stock? Give reasons for your answer.

Question 55-7 If the decedent was engaged in an uncompleted contract at the time of death, do the profits on final completion belong to principal or income?

Question 55-8. *A* is a purchasing and sales factor, carrying on a foreign business. *A* dies on January 15. The auditor finds that orders to purchase were received prior to January 15, and were executed but not shipped until after January 15, since no steamship was in port to receive the goods. The business is to be carried on by the executor. How are the orders to be regarded with respect to the distribution between corpus and income of the estate?

Question 55-9. If a trust estate consists of wasting assets, such as mines, oil wells, or standing timber, must the trustee provide for depletion in determining the income?

Question 55-10. Should the following items be regarded as

applicable to corpus or income?

(1) Legacies paid in cash
(2) Funeral expenses
(3) Profit or loss on sale of investment
(4) Cash dividend received on stock purchased by the executors.
(5) Quarterly allowance to widow.
(6) Cash dividend on stock left by the testator.

PROBLEMS

Problem 55-1. You are called in to assist in the preparation of the accounts of Will Wade, executor of the estate of A. D. Biggs, who died on May 12, 1934. No books have been kept, but you obtain a certified copy of the inventory of the estate, filed by the executor with the probate court, and bank statements and canceled checks evidencing his receipts and disbursements of the estate funds.

Among the receipts by the executor are the following:

May	20—Cash in bank paid to executor.	$4,050
	25—Dividend on XY stock, declared May 1, 1933	800
	27—Interest on $30,000 00 note dated November 27, 1930	900
	30—Biggs' commissions for April and May, 1934	1,050
August	1—Sale of bonds inventoried at $4,000 00	4,500
	Accrued interest thereon from April 1, 1934, at 6%	80
	20—Dividends on Albion company stock, declared July 15, 1934	
	Cash dividend	3,000
	Stock dividend.	4,500
September	21—Sale of rights for subscription to additional XY stock	2,410
November	15—Sale of stallion	1,400
	And four-months-old colt	600
December	15—Profits for fiscal year ending October 31, 1934, in firm of Biggs Brothers, as per copartnership agreement	4,000
	20—Dividend on account in closed bank	865

Show how these receipts should be recorded in the executor's accounts.

Problem 55-2. Jack Ford died on June 15, 1933, and A R. Flournoy was appointed executor The inventory contained the following items:

Bonds of Bayon Company—J & J.—6%	$50,000 00
Bonds of Dever Company—J & D —6%	10,000 00
Accrued Interest on Bonds	?
Stock of Founders Company—Par	50,000 00
Dividends Declared	1,000 00
Accounts Receivable	6,350 00
Cash	4,710 00

On July 8, the executor discovered a note receivable of $4,000.00, dated March 1, 1933, bearing interest at 6%.

Cash collections were as follows:

1933		
July	1—Interest on Bayon Bonds	$1,500 00
July	5—Dividends	1,000 00
September	1—Note Receivable	1,000 00
	Interest in Full to Date	?
September	5—Accounts Receivable	3,600 00
December	1—Interest on Dever Bonds	300 00
December	8—Accounts Receivable (no further collections possible)	1,850 00
1934		
January	2—Interest on Bayon Bonds	1,500 00
January	5—Dividends	3,000 00
January	31—Stock of Founders Company (Par, $5,500 00)	7,150 00
March	1—Note and Interest in Full	?

Cash disbursements were as follows:

July	25—Physician's Bill	$ 400 00
August	27—Funeral Expenses	850 00
December	20—Miscellaneous Debts	2,615 00
January	20—Miscellaneous Administration Expenses	340 00
January	31—Legacies	10,000 00

All income cash collections were paid over to the widow quarterly from the date of death

Record all the foregoing facts in the executor's cash book and journal. Post to ledger accounts, and prepare a trial balance as of March 1, 1934

Problem 55-3. The executor of the estate of Robert Mitchell has paid all debts, expenses, and special legacies in accordance with the will, and is ready, on May 31, 1933, to distribute the estate. He has funds of $310,250 00 to divide. The following is a statement indicating the basis of division stipulated by the will, and also the amounts and dates of certain advances that are required by the will to be included in the estate, together with simple interest at 6%.

		Advances	
Beneficiary	Share	Amount	Date
Helen Mitchell	⅖	$ —	—
Edward Mitchell	⅕	50,000 00	June 1, 1930
Frank Mitchell	⅕	15,000 00	May 1, 1931
Grace B White	⅕	10,000 00	December 1, 1932

Prepare a statement showing the distribution of the estate.

Problem 55-4. On January 1, 1915, B A. Pearson came into possession of \$75,000.00 as executor of the estate of his deceased wife, Belle, whose will provided for the division of her estate equally between her two children. Pearson invested \$60,000.00 of the assets of the estate in 6% bonds, interest payable semiannually on June 30 and December 31.

On January 31, 1935, Pearson died His executor found assets amounting to \$294,000.00, including the bonds mentioned above The will provided that one half of his estate should go to his widow, and that the balance should be divided equally among his three children (one by his second wife)

Pearson had never made any accounting of the estate of his first wife, nor had he applied any of the assets thereof to the specific benefit of the stated beneficiaries.

Prepare a statement showing the proper distribution of the \$294,000.00 of assets found by Pearson's executors, assuming no expenses of administration and assuming also a legal requirement for the allowance of simple interest at the rate of 5% on cash funds held by Pearson and not applied in accordance with the requirements of his first wife's will.

QUESTIONS AND PROBLEMS ON CHAPTER 56

QUESTIONS

Question 56-1. If the same person is both executor and trustee, what distinction should be made between his records as executor and as trustee?

Question 56-2. Explain the method of closing the books of an executor, showing the final distribution of the estate.

Question 56-3. State three rules that have been applied in different states for the classification of stock dividends as between principal and income.

Question 56-4. Name the various classes of items that might appear in a charge and discharge statement as to principal.

Name the various classes of items that might appear in a charge and discharge statement as to income

Question 56-5. What is the difference between an executor's intermediate and final account?

Question 56-6. The estate of Samuel J Henderson contains fifty shares of First National Bank stock of $100 par value each This stock is carried on the trustee's books at $550.00 per share, or a total of $27,500 00 In accordance with its regular custom the bank paid a dividend of 12% on March 1, 1934. The dividend was paid in cash, but the bank gave its stockholders the option of buying new stock at par, to the amount of the dividend. The trustees indorsed and returned the dividend check, receiving in exchange six shares of new stock How should this transaction affect the interests of the life tenants and the remainderman?

PROBLEMS

Problem 56-1. The following trial balance was taken on December 31, 1933, from the books of Howard Webster, executor of the estate of Charles Jamison, who died on May 9, 1933.

Prepare the executor's charge and discharge statements (without supporting schedules), and make the journal entries required to close the books.

Bonds	$25,000.00	
Stock	20,000.00	
Loss on Realization	575.00	
Gain on Realization		$ 635 00
Funeral and Administration Expense	1,630.00	
Debts of Decedent	2,315 00	
Legacy—Fred Burns	5,000 00	
Income		2,250 00
Expense—Income	460 00	
Distributions of Income Cash	1,000.00	
Cash—Income	790 00	
Cash—Principal	6,710.00	
Estate Corpus		56,970 00
Assets Not Inventoried		3,625 00
	$63,480 00	$63,480 00

Problem 56-2. John Smith died on January 15, 1933, and in his will named Richard Wells as executor The will provided that a legacy of $3,000.00 be paid to Mary Smith, sister of the testator, and that, after payment of all debts, the residuary estate be divided equally between the testator's wife and son

The estate consisted of the following:

Cash in bank	$ 948 50
One month's salary due from employer	500 00
Ten Union Company 6% bonds	10,000 00
One income bond, Central Corporation	1,000 00
Demand note of Walter Hays	1,000 00

At his death the testator owed:

Two months' rent	$250 00
Dr Mayer	481 75

The executor received $948.50 from the bank, with $21 25 interest. He sold the Union Company bonds at 104 and four months' interest, the income bond, for $510 00 flat; and paid $390.00 for funeral expenses, $185 00, for mourning apparel, and $265 00, for legal and other expenses. Walter Hays was bankrupt, and his note proved to be worthless.

The executor deducted his commission of $200 00, and distributed the funds of the estate according to the terms of the will.

Prepare a charge and discharge statement

Problem 56-3. *A* dies on March 7, 1933, leaving an estate consisting of the following property:

Cash in bank	$ 6,245 00
Accounts receivable	45,000.00
Real estate, unimproved, valued at	17,000 00

	Par	Market
Bank stock	$10,000 00	$18,350 00
Mining stock	15,000.00	12,000 00
Railway bonds, 4%, J & J	12,000 00	11,050 00
Municipal bonds, $3\frac{1}{2}$%, F & A	20,000 00	20,450 00

Three of his heirs are indebted to him for money loaned:

C	$8,000 00
D	6,000 00
E	4,500 00

The will directs the executors to convert the assets and distribute the funds in the following manner:

	Principal	Income
B (Widow)	$\frac{2}{5}$	all
C	$\frac{1}{5}$	
D	$\frac{1}{5}$	
E	$\frac{1}{5}$	

The bank stock is sold at $225.00, and the mining stock, at $73\frac{1}{2}$, both sales taking place on August 15, 1933

The municipal bonds are sold on November 20, 1933, at $103\frac{7}{8}$ and accrued interest

The real estate is sold on December 10, 1933, for $4,000.00 in cash and a 6% mortgage of $10,000 00

The railway bonds mature on January 1, 1934.

On April 30, 1934, the accounts receivable are finally collected, with losses and expenses amounting to $1,385.00, and the mortgage is sold at 97 and accrued interest.

Interest received on bank balances, $200.00; dividends received, $460.00.

The executors pay the decedent's debts and funeral expenses, $1,400 00, counsel fees, $550.00, advances to *B*, $850.00; safe deposit rent, $25 00; office expenses incident to collection of income, $400.00. The executors wind up the estate on May 1, 1934, and are allowed a fee of $1,200 00, $250 of which is chargeable to income

Prepare the charge and discharge statements and the executors' cash book Show the distribution of the cash

In computing accrued interest, use the 360-day year and the actual number of days.

Problem 56-4. A. O Forbes, executor of the estate of Will Hoyne, who died on May 15, 1933, asks you to prepare statements for him to render to the court as of July 31, 1934, using the following information:

The cash on hand and in bank on May 15, 1933, was $2,500.00.

The estate contained certain real estate which the will ordered sold It was inventoried at $17,000 00, and sold on August 1, 1933, the executor received $6,000 00 in cash and a mortgage for $10,000.00, bearing interest at 6% per annum, payable semiannually, all interest was collected when due The mortgage was sold on May 1, 1934, at 102 and accrued interest

Accounts receivable of $17,250 00 were collected in full, two accounts of $500 00 each proved worthless.

Notes receivable and collections thereon were as follows:

Maker	Principal	Interest Accrued May 15, 1933	Total Collected
Frank Poor	$ 4,000.00	$220 00	$ 4,400 00
James Timm	10,000 00	100 00	10,300 00
L D Ways	8,000 00	50 00	5,500 00

No further collections are expected

Securities owned.

Playfair Corporation, 6's, J & J, $20,000 00 par value; inventoried at 98, matured July 1, 1934

Barber Company, 6's, M & S, $12,000 00 par value, inventoried at par; called for redemption on March 1, 1934, at 103

Becker Brothers, 7% Prior Preferred, 150 shares; inventoried at par ($15,000.00); dividend of 6%, declared May 1 of each year, payable May 20; sold May 8, 1934, at 107 and declared dividend.

The executor paid the decedent's debts and funeral expenses, $2,580 00; attorney's fees, $800 00, expenses of general administration, $200 00; legacies of $8,500 00; and executor's fee, $1,000 00, apportionable equally to income and principal.

The estate was divided on July 31, 1934, the widow receiving all of the net income and one third of the principal, and three children, Helen, Jack, and Leon, each receiving two ninths of the principal. In the division of the estate, consideration was given to advances made to the children during the decedent's life, in the respective amounts of $8,000.00, $4,500.00, and $10,500 00.

Problem 56-5. Frank Healy dies on May 15, 1933, leaving a will in which he instructs his executor to:

(1) Use his best judgment in the disposition of such assets as may be necessary to liquidate all his liabilities.

(2) Pay his widow, Martha, an allowance out of income at the

rate of \$1,250 00 per month, from the date of his death to the date of the distribution of the residue of his estate

(3) Distribute the residue of his estate, after all claims and legacies have been met, as follows. one half to his widow, and one half to certain trustees named in the will.

The executor draws up the following inventory of the estate, at appraised values:

Real Estate	\$260,000 00
Corporation Stock	340,000 00
Bonds	390,510 00
Loans	25,650 00
Land Contracts	60,500 00
Cash	45,000 00
Accrued Interest Receivable	5,810 00

From the date of death to October 15, 1934, the cash receipts are:

80 Bonds, par \$1,000 00, inventoried at 105, sold at 102¾.
500 shares of stock, par \$100 00, inventoried at 60, sold at 80.
400 shares of stock, par \$50 00, inventoried at 70, sold at 86½
Real estate, inventoried at \$45,000.00, and encumbered by a mortgage of \$30,000 00, sold by consent of the probate court and the widow for a sum \$25,000 00 in excess of the mortgage, the purchaser assuming the mortgage.
Dividends, \$19,000.00.
Interest, \$27,900.00.
Net rental income, \$20,650 00.
Loans, \$18,465.00.

Cash disbursements are:

Bills payable, \$130.00.00.
Accounts payable, \$1,200 00.
Funeral expenses, \$1,800 00
Interest (of which \$1,200.00 was accrued at death), \$5,750 00.
Office expense (\$4,000.00 against principal), \$7,000 00.
Executor's fee (\$10,000 00 against principal), \$12,500.00
Legacies, \$50,000 00
Payments to widow out of income, \$22,500.00

The accrued interest on October 15, 1934, totals \$3,150 00

Prepare journal entries recording the foregoing facts, the closing of the books, and the distribution of the estate on October 15, 1934.
Prepare statements for submission to the court.

PROBLEMS ON CHAPTER 57

Problem 57-1. You are called, during January 1934, to assist the officials of the Morning Company in the preparation of a budget for the current year. The statements of the company for the first year of its operations appear on the following pages.

In addition to the accompanying statements, you are given the following data relative to the estimates for 1934:

Sales: Sales prices have been reduced one eighth, and a 60% increase in quantity volume is expected. Sales are uniform throughout the year.

Collections: It is estimated that the accounts receivable on the books at the end of 1933 will be disposed of as follows: an amount equal to the present reserve will be written off, and the remainder will be collected. Collections, discounts, bad debt provisions, and write-offs during 1934 may be estimated on the basis of 1933 experience.

Production: The production during 1934 must be increased to take care of the increased sales, and also to provide for a finished goods inventory at the end of 1934, equal to the sales requirements for one and one-half months. Production will be uniform throughout the year.

Materials: Material prices will be reduced 10% by purchasing from a different supplier, but freight rates will be increased 20%. The inventory at the end of the year is to be equal to one month's production requirements. Purchases from the proposed new supplier will be paid sixty days after billing, less 1%. Freight will be paid in the month of purchase.

Accounts payable to the former supplier will be paid less 3% discount.

Direct and Indirect Labor: All factory wages and salaries were increased 5%, effective January 1, 1934. Direct labor varies with volume. Half of the indirect labor is fixed, and the remainder varies with the quantity of production. Labor costs for one-half month will be unpaid at the end of the year.

Other Manufacturing Costs: License fees are fixed. An appropriation of $32,560 00 has been made for 1934 experimental expense.

Balance Sheet—December 31, 1933

Assets

Current Assets:			
Cash		$ 48,800	
Accounts Receivable	$540,000		
Less Reserve for Bad Debts	36,000	504,000	
Inventories:			
Finished Goods	$ 90,000		
Raw Materials	91,800	181,800	
Total Current Assets			$ 734,600
Deferred Charges			
Advances to Salesmen		$ 16,000	
Factory Supplies		18,700	
Total Deferred Charges			34,700
Fixed Assets			
Land		$ 69,500	
Buildings	$150,000		
Machinery and Equipment	260,000		
Furniture and Fixtures	50,000		
Total	$460,000		
Reserve for Depreciation	20,000	440,000	
Total Fixed Assets			509,500
Goodwill			60,000
			$1,338,800

Liabilities and Net Worth

Current Liabilities:		
Bank Loans—6%	$180,000	
Accounts Payable—Materials	150,000	
Accrued Factory Wages—Indirect	7,500	
Reserve for 1933 Property and Income Taxes	33,300	
Total Current Liabilities		$ 370,800
Mortgage Payable—5%—Due June 30, 1947		275,000
Net Worth:		
Preferred Stock—7%	$200,000	
Common Stock	400,000	
Surplus	93,000	
Total Net Worth		693,000
		$1,338,800

Depreciation rates are: buildings, 6%, machinery and furniture, 10%; one half of the annual rates are used for additions (see below) Other items vary with output, after $7,300 00 of the non-recurring expenses included under Miscellaneous has been eliminated All manufacturing expenses except taxes will be paid during the year. Deferred charges for factory supplies will increase to $22,000 00.

Selling Expenses: Salaries are fixed; commissions are based on sales; effective January 1, 1934, salesmen are to be allowed a group bonus (payable after the close of the year) of 5% on annual sales in excess of $3,500,000.00 The 1934 advertising appropriation is $250,000.00. The foregoing items, except the bonus, and

Profit and Loss Statement
Year Ended December 31, 1933

Sales		$3,000,000 00
Cost of Goods Sold		1,800,000 00
Gross Profit on Sales		$1,200,000 00
Selling Expenses:		
Salaries	$ 85,000 00	
Commissions	135,000 00	
Advertising	310,000 00	
Branch Office Expense	40,000 00	
Traveling	30,000 00	
Miscellaneous	38,000 00	
Total Selling Expenses		638,000 00
Net Profit on Sales		$ 562,000 00
Administrative Expenses		
Officers' Salaries	$150,000 00	
Office Salaries	77,500 00	
Office Supplies and Expenses	42,500 00	
Bad Debts	60,000 00	
Corporate Taxes	11,000 00	
Depreciation	2,500 00	
Miscellaneous	22,500 00	
Total Administrative Expenses		366,000 00
Net Profit on Operations		$ 196,000 00
Net Financial Expense.		
Interest Expense	$ 25,580 00	
Discount on Sales	48,720 00	
Total	$ 74,300 00	
Less Discount on Purchases.	24,800 00	
Net Financial Expense		49,500 00
Net Income Before Federal Income Tax		$ 146,500 00
Federal Income Tax		18,300 00
Net Income		$ 128,200 00

December commissions, will be paid in full during the year, partly in cash and partly by complete application of the advances to salesmen; similar advances will be discontinued in 1934 Other selling expenses (of which 95% will be paid during the year) vary with the quantity of sales volume, after the following non-recurring items have been excluded:

Branch office expense	$10,000 00
Traveling	8,000 00
Miscellaneous	15,000 00

Beginning January 1, 1934, the company's sales are subject to a 2% state sales tax, each month's accrual of this tax is payable in the following month.

Administrative Expenses: Officers' salaries are fixed; bad debts and depreciation are to be computed on the same basis as in 1933;

Statement of Cost of Goods Sold
Year Ended December 31, 1933

Materials		
Purchases	$900,000 00	
Freight In	18,000 00	
Total	$918,000 00	
Less Inventory—December 31	91,800 00	
Materials Used		$ 826,200 00
Direct Labor		528,000 00
Manufacturing Expenses		
Indirect Labor and Supervision	$180,000 00	
License Fees	100,000 00	
Experimental Expense	37,500 00	
Power and Light	30,000 00	
Small Tools and Supplies	52,500 00	
Depreciation	17,500 00	
Insurance and Building Expense	21,000 00	
Taxes	15,000 00	
Repairs	24,000 00	
Spoilage	6,000 00	
Miscellaneous	52,300 00	
Total Manufacturing Expenses		535,800 00
Total Cost		$1,890,000 00
Less Inventory of Finished Goods—December 31		90,000 00
Cost of Goods Sold		$1,800,000 00

other expenses will increase 10%, after $8,000 00 of the organization expense included in Miscellaneous is eliminated Five per cent of office supplies and expenses and miscellaneous expenses will be unpaid at the end of the year.

Additions to Fixed Assets· Contracts have been entered into for a new factory building to cost $80,000.00 and additional machinery therefor to cost $100,000.00. The building contractor and the machinery supplier have agreed to take, in payment, the company's ten-year 6% mortgage notes, dated April 1, 1934, at 90 Interest on these notes is payable semiannually

Financial Expenses· The company's bank loan requirements are expected to average $300,000 00 during the year In order to improve its working capital ratio, the company, at the end of the year, will make the largest possible payment in reduction of the bank loan; the payment will be an amount equally divisible by $5,000 00, and the bank requires that the amount kept on deposit be not less than 25% of the loan.

Federal Income Tax The rate for 1934 is 13¾%.

Dividend Payments· The full dividend requirement on the preferred stock is to be paid, and dividends up to 7½% will be paid on the common stock if the earnings are sufficient

Prepare estimated operating statements and a balance sheet. Make all computations to the nearest dollar.

Problem 57-2. X desires to engage in business as a retail distributor of refrigerators, which he proposes to market on an installment basis. The refrigerators will be sold for \$150 00 each; \$15 00 will be collected at the time of sale, and the balance of the sale price will be collected in nine monthly installments of \$15.00.

X can obtain the refrigerators on a consignment basis, under an agreement to remit at the end of each month, at the rate of \$90.00 each, for all refrigerators sold during the month. Salesmen are to be allowed a 20% commission, payable at the end of the month of sale. Overhead expenses are estimated at \$26,400 00, and interest, credit, and collection expenses, at \$12,000 00 (For purposes of this problem, it may be assumed that these expenses will be incurred in equal monthly amounts, payable at the end of the month) Recoveries and repossessions are expected to offset losses on bad accounts

X budgets his first year's sales as follows.

	Units		Units
January .	75	July	300
February	125	August	200
March	150	September	150
April	200	October	100
May	400	November	75
June	100	December	150

X does not have sufficient capital to finance his business, and he carries his plans to his banker. The bank extends X a line of credit, secured by a pledge of his entire accounts receivable, on the following basis:

(1) At the end of each month the bank will honor a draft drawn by the manufacturer in any amount up to 60% of X's accounts receivable at that date.

(2) X is to maintain at all times a bank balance of not less than 15% of his bank loan, with a minimum of \$5,000 00

(3) On January 1, X is to invest in the business the maximum amount of cash he will require (in addition to the bank loan) at the peak point of the year, and is to make no withdrawals of this capital during the year.

(4) Borrowings from, and repayments to, the bank are to be made in units of \$1,000 00.

Compute the amount of X's initial investment, to the nearest thousand dollars, and make a schedule of monthly borrowings and repayments.

Problem 57-3. You are engaged by Cavanaugh Company to prepare a forecast of its operations for the period from April 1 to

July 31, 1934. From the information given, prepare a monthly cash statement, a monthly income and expense statement in columnar form, and a balance sheet as of July 31, 1934

Balance Sheet—March 31, 1934

Assets	
Cash on Deposit	$ 24,820 00
Accounts Receivable	69,600 00
Inventory of Raw Material	27,000 00
Buildings, Machinery, and Equipment	135,000 00
Prepaid Insurance	3,300 00
	$259,720 00
Liabilities and Net Worth	
Note Payable (special 6% loan)	$ 30,000 00
Accounts Payable	51,850 00
Accrued Pay Roll	11,950 00
Accrued Interest and Taxes	3,300 00
Depreciation Reserve	2,700 00
Capital Stock	150,000 00
Surplus	9,920 00
	$259,720 00

Income and Expense—Three Months Ended March 31, 1934

Sales		$180,000 00
Material Consumed	$60,000 00	
Direct Labor	36,000 00	
Overhead	36,000 00	132,000 00
		$ 48,000 00
Administrative Expense	$15,000 00	
Selling Expense	9,000 00	24,000 00
		$ 24,000 00
Cash Discounts	$ 1,080 00	
Depreciation	2,700 00	
Interest	300 00	4,080 00
Net Profit		$ 19,920 00
Organization Expense		10,000 00
Surplus		$ 9,920 00

All buildings and equipment are used in manufacturing. In July, $15,000 00 of new machinery will be purchased Depreciation charges will be as follows: April, May, and June, $1,000 00 each, July, $1,060.00.

Thirty per cent of sales are collected during the month of shipment and are allowed 2% cash discount; 60% are collected during the following month; 8%, in the next month; and the balance may be considered uncollectible.

Accounts payable for all purchases and expenses, including administrative and selling, are due on the 10th of the following month Pay rolls are payable on the 5th and 20th of each month

for preceding half calendar-month periods

Cavanaugh Company's credit permits loans in multiples of \$5,000 00 for full calendar-months only, with interest deducted at 6% per annum In computing monthly cash requirements, you may disregard the actual date of receipts and disbursements and consider that the full month's receipts are available to apply on the disbursements of the same month

The special term note outstanding March 31 is dated February 1, due in four months

The following summary shows actual sales and production for the first three months of the year and estimated sales and production for the succeeding five months:

	Units	
	Sales	Production
January (actual)	10,000	10,000
February "	20,000	20,000
March "	30,000	30,000
April	20,000	30,000
May	25,000	40,000
June	30,000	35,000
July	65,000	60,000
August	50,000	50,000

Cost of finished product sold should be based on the average of the opening inventory and the current month's production costs. It is expected that the selling price of \$3 00 a unit can be maintained and that selling expense will retain a fixed relation to sales. Administrative expenses will remain unchanged during the period covered by your investigation.

Direct labor and material costs have a constant relation to production Overhead expenses are at a minimum of \$10,000 00 a month when production is at 10,000 units or less, and increase with production at the rate of \$1 00 for each \$3 00 expended for direct labor. Fifty per cent of such expenses consists of indirect labor and fixed monthly charges for insurance and taxes, and 50% comprises various other manufacturing expenses, exclusive of depreciation.

Insurance was taken out on January 1, for three years, at a cost of \$3,600 00. Taxes of \$12,000 00 per annum are payable June 20 and December 20 for current semiannual periods.

It is desired that a raw materials inventory sufficient only for the following month's requirements be maintained throughout the period

At a directors' meeting to be held during April, a dividend of 10% will be declared, payable May 15.

Income taxes may be disregarded.

Problem 57-4. In January 1934, the Northern Oil Company prepared a budget covering the six months from January 1 to June 30, 1934, the main purpose being an endeavor to forecast the company's *cash position* as of June 30, 1934

The figures used in compiling the budget and the actual figures for the six months are given below

From these and the data following, you are required to prepare a statement for presentation to the board of directors, showing a comparison between estimated and actual results and, in addition, a brief but comprehensive report, to be read in conjunction with the statement, explaining the differences.

The figures given below cover all sources of revenue and expense Cash on hand on January 1, 1934, is $310,500 00

NORTHERN OIL COMPANY

	Estimated	Actual
Sales of Crude Oil	$4,000,000 00	$3,610,000 00
Sales of Refined Products		
Gasoline	4,400,000 00	4,200,000 00
Kerosene	420,000 00	406,000 00
Others	1,555,200 00	1,580,400 00
Purchases of Refined Products		
Gasoline	315,000 00	380,000 00
Others		102,000 00
Operating Expenses.		
Direct Charges	1,620,000 00	1,560,000 00
Materials and Supplies from Warehouses	180,000 00	170,000 00
Marketing Expenses	2,290,400 00	2,222,240 00
General and Administrative Expenses	900,000 00	800,000 00
Capital Additions.		
Direct Charges	2,000,000 00	1,800,000 00
Materials and Supplies from Warehouses	1,500,000 00	1,500,000 00
Interest on Bonds	60,000 00	60,000.00
Bond Sinking Fund	50,000 00	50,000 00
Preferred Stock Dividend	350,000 00	350,000 00
Proferred Stock Sinking Fund	200,000 00	200,000 00
Accounts Receivable		
January 1	900,000 00	900,000 00
June 30	1,200,000 00	1,100,000 00
Accounts Payable		
January 1	700,000 00	700,000 00
June 30	800,000 00	750,000 00
Inventories of Materials and Supplies		
For Operating Purposes, January 1	50,000 00	50,000 00
For Operating Purposes, June 30	50,000 00	50,000 00
For New Construction, January 1	500,000 00	500,000 00
For New Construction, June 30	500,000 00	400,000 00

There are no marketing expenses on crude oil sales

Purchases of materials and supplies are paid for within the month received.

Statement of Quantities

	Purchases	Production	Sales
Crude Oil (Barrels).			
Estimated		4,000,000	2,000,000
Actual	. . .	3,800,000	1,900,000
Refined Products (Gallons)			
Gasoline.			
Estimated	3,000,000	50,400,000	40,000,000
Actual	4,000,000	47,880,000	42,000,000
Kerosene			
Estimated		8,400,000	6,000,000
Actual		7,980,000	5,800,000
Others			
Estimated	.	21,000,000	19,440,000
Actual	1,200,000	19,950,000	17,560,000
Refinery Loss			
Estimated	. . .	4,200,000	

Note. 1 barrel equals 42 gallons.

QUESTIONS AND PROBLEMS ON CHAPTER 58

QUESTIONS

Question 58-1. A municipality obtained a tax levy as follows:

	Mills
For General Fund purposes	8 44
For Sinking Fund purposes	4 9
Total	13 34

On the basis of this levy, \$25,000 00 was collected during a certain month of the fiscal year. What part of this \$25,000 00 belongs to the General Fund and what part to the Sinking Fund?

Question 58-2. A municipality derives its revenue from taxation The valuation of its assessable property is as follows:

Real Property	\$40,350,000 00	
Personal Property	4,100,000 00	
Total Valuation		\$44,450,000 00

The estimated expenses for 1935 are as follows:

Police Department	\$96,975 00	
Fire Department	96,000 00	
Street Department	48,500 00	
Sewer Department	39,400 00	
Health Department	15,000 00	
Other Departments	37,500 00	
Total.		\$333,375 00

In addition to meeting these expenses, the city must provide for the interest on its bond debt of \$1,333,350 00, which bears 5%, and must, according to the stipulation in its charter, levy one half of a mill tax for each park and library, and one mill tax for a sinking fund for the redemption of its bonds

Prepare a statement giving the tax levy in mills and amounts necessary to produce sufficient money for the following funds:

General Fund
Interest Fund.
Park Fund.
Library Fund.
Sinking Fund.

Question 58-3. A municipality sells its bond issue of $100,000 00 for water works purposes, receiving par, 2% premium, and $500 00 accrued interest. How much of the proceeds can the municipality use for water works purposes? Give reasons for your answer

Question 58-4. In auditing the accounts of the city of Cook, the following balance sheet under the heading of Capital Fund was submitted to you for verification·

Cash	$ 5,000 00	Vouchers Payable	$ 1,000 00
Properties	2,500,000 00	Capital Surplus	1,504,000 00
		Funded Debt	1,000,000 00
	$2,505,000 00		$2.505,000 00

You find that $25,000 00 of the funded debt was incurred on account of a current deficit

Prepare a corrected statement for use in your audit report.

Question 58-5. In auditing the annual report of the town of X, you find all the following items of receipts stated under the general heading of "Revenues":

1 Taxes received
2. Loan from Bank of X
3. Dog licenses.
4. Municipal court fines.
5. Bequest from the estate of A to establish town library.
6. Street assessments collected from owners of property
7 Permits for parades.
8. Sale of worn-out equipment.
9 State grant for upkeep of a state highway within town limits.
10. Deposit by B to cover cost of extra sewer connection.
11 Interest on bank deposits
12 Donation from C toward repairs on his street.
13 Annual payment under franchise by X Street Railway Co
14. Fees turned in by town clerk
15. Rent of city dock to steamboat company
16 Assessments on members of police force for pension fund
17 Received from B: balance of cost of extra sewer connection (see 10)
18. Newsstand privilege in city hall
19. Proceeds of paving bonds sold at 110.

Restate these items to show true revenues of the town, and indicate how the other items should be shown or treated.

Question 58-6. The town of X erects a school building from the proceeds of bonds issued for the purpose It is estimated that the building will last twenty years. The bonds also mature in twenty years and contain a sinking fund clause to provide the funds for their payment at maturity The school board makes no provision for depreciation on the building in the annual tax rate, and a controversy arises in the town as to whether such a provision should be made Discuss briefly both sides of this question.

PROBLEMS

Problem 58-1. In the city of X, a tax levy for a special fund was made on January 1, 1933, in the amount of $1,314,435 00 The receipts for this purpose to June 30 totaled $821,943.00, which sum was the balance in the fund on July 1 Receipts for the succeeding months were as follows. July, $286,842.00, August, $52,137.00; September, $38,441 00, October, $33,333 00, and November, $2 00. The November receipts were the final possible collections from this levy

An appropriation of $1,250,000.00 was made on July 1 from this fund, and vouchers were certified against the appropriation and warrants issued as follows: July, $89,377 00; August, $95,574 00; September, $120,841 00, and October, $138,358 00.

During the month of November vouchers were certified to the amount of $160,581.00, for which warrants were issued to the amount of $117,193 00.

The total amount of warrants paid by the treasurer during the five months ending November 30 was $474,059 00; no warrants were outstanding on July 1

Set up a statement of the accounts of the special fund, and a balance sheet of the fund as of November 30

Problem 58-2. The council of Lake City drew up the following budget for the fiscal year 1934–35.

Appropriations	$300,000 00
Estimated miscellaneous revenues	30,000 00
Required to be raised by taxation	$270,000 00

The current year's tax levy, for the first time, was made at a rate which permitted the establishment of a reserve (10%) for uncollectible taxes. On June 30, 1935, the reserve for taxes is to be adjusted to 50% of the current year's taxes uncollected, and all prior years' taxes uncollected ($4,000 00) are to be charged off

When specific appropriations are approved, it is the city's practice to draw up warrants and register them with the county treasurer, upon receipt of audited invoices, the warrants are issued. Warrants registered during the current year total $290,000.00

Interest on warrants is not covered by the appropriations.
On June 30, 1935, the city's Cash account appears as follows:

Balance—June 30, 1934		$ 6,000 00
Receipts		
Current year's taxes	$250,000 00	
Miscellaneous revenues	35,000 00	
Prior years' taxes	15,000 00	
Interest thereon	1,500 00	301,500 00
Total		$307,500 00
Disbursements.		
Current year's warrants paid	$280,000 00	
Interest thereon	1,000 00	
Prior years' warrants paid	18,000 00	299,000 00
Cash balance, June 30, 1935		$ 8,500 00

Prepare a statement of accounts for the year; a balance sheet—June 30, 1935, and a statement of revenues and surplus for the year and a comparison with the budget.

Problem 58-3. Your examination of the accounts of the Smithtown Home for Children discloses the following

The home was founded on January 1, 1930, by two men who made contributions as follows: mortgages, $100,000.00; bonds valued at $200,000 00; land valued at $75,000 00; buildings and equipment valued at $120,000 00; and cash, $20,000 00 for general purposes

According to the trustees' minutes, the following funds were established: Smith endowment fund, $150,000 00, and Taylor endowment fund, $150,000 00, representing investments in mortgages and bonds, the income therefrom to be used for general purposes, property and equipment fund, representing the property and equipment of the institution; and general fund, representing the general funds of the institution.

The following transactions were recorded in the cash book during the three months ended March 31, 1930.

Receipts		
Original contribution for general purposes	$20,000 00	
Mortgage principal	10,000.00	
Donation for improvements to buildings	15,000 00	
Donation for painting and repairs to buildings	5,000 00	
Bond interest	2,500 00	
Mortgage interest	2,500 00	
Board and maintenance of children	5,000 00	$60,000 00
Payments		
Ice plant	$ 5,000 00	
Petty cash fund	100 00	
Board and maintenance of children	17,900 00	
General and administrative expenses	2,000 00	25,000 00
Balance—March 31, 1930		$35,000 00

At March 31, 1930, bond interest due and uncollected amounted to $500 00, uncollected charges for board and maintenance of children, $6,000 00; and unpaid bills for general expenses, $500 00, and for board and maintenance of children, $500 00

In accordance with the above information, prepare a balance sheet as at March 31, 1930, and a statement of income collectible and expenditures for the three months ended that date.

Problem 58-4. On December 31, 1929, the trial balance of the Hospital for Incurables was as follows:

Accrued Wages, Household		$ 1,431
Accrued Wages, Nurses		2,088
Ambulance Expenses	$ 11,540	
Ambulance Revenue		12,565
Audited Vouchers		42,510
Bonds Owned, Endowment	506,090	
Bonds Purchased, Endowment	22,500	
Building Fund, Principal		177,010
Building Fund, Income		29,150
Cash in Bank, General Fund	4,449	
Cash in Bank, Endowment Fund	4,341	
Cash in Bank, Building Fund	7,315	
Certificate of Deposit, Building Fund	23,000	
Commonwealth of Pennsylvania		45,000
Construction in Progress	77,490	
Contributions, Current		5,507
Contributions, Deficit		17,560
Certificate of Deposit Matured		5,000
Deficit, 1928	27,510	
Drug Sales		26,114
Drug Purchases	18,110	
Endowment Fund, Principal		795,064
Guaranteed Mortgages, Endowment	187,000	
General Expenses (including ground rent)	32,176	
General Fund, Principal		583,236
Ground Rents, Endowment	900	
Ground Rent Payable, Hospital Land		6,000
Heat, Light, and Power	24,220	
Hospital Buildings	347,310	
Hospital Equipment	197,600	
Hospital Insurance	540	
Hospital Land	60,000	
Hospital Supplies	51,710	
Improvements, Foreclosed Real Estate	286	
Income from Endowment Fund		40,000
Income to General Fund	40,000	
Interest on Bonds, Endowment		27,650
Interest on Certificate of Deposit		485
Interest on Guaranteed Mortgages		8,745
Interest on U S Treasury Notes		5,950
Inventories of Drugs	6,570	
Laundry	25,612	

Loan Payable to Building Fund		$ 40,000
Loan Payable to Endowment Fund		62,500
Loan Receivable from General Fund—January 1, 1929	$ 40,000	
Loan Receivable from Building Fund—July 1, 1929	62,500	
Maintenance and Repairs, Hospital	40,294	
New Roof—Out-Patient Building	1,610	
Operating Room		16,410
Out-patient Department		26,751
Pay Patients' Accounts	13,513	
Patients' Deposits		1,750
Petty Cash	1,200	
Plumbing Alterations, Ward C	8,762	
Prepaid Insurance, Hospital	7,172	
Private Rooms		131,710
Real Estate, Endowment Fund, Mortgage Foreclosed	8,926	
Reserve for Replacements		17,650
Rents Received, Foreclosed Real Estate		1,290
Repairs to Foreclosed Real Estate	57	
Safe Deposit Box, Endowment Fund	15	
Salaries	9,399	
Securities of Doubtful Value, Endowment Fund	7	
Subscriptions Collected		45,710
Subscriptions Receivable, Building Fund	83,000	
Taxes, Foreclosed Real Estate	127	
Telephone Revenue		265
Unclaimed Wages		187
U S Treasury Notes, Building Fund	95,000	
Wages, Buildings, and Grounds	21,707	
Wages, Household	87,065	
Wages, Nurses	110,840	
Wages, Other	9,270	
Ward Patients		92,685
X-Ray		8,760
	$2,276,733	$2,276,733

Only cash transactions have been recorded since the books were adjusted on December 31, 1928 In addition, you find that:

1 The minutes state that:
   (a) All loans between funds shall pay 6% interest.
   (b) This interest must be cleared every year.
   (c) The appropriation granted by the Commonwealth of Pennsylvania for the year 1929 is $60,000 00.
   (d) The bequest "for endowment" from the estate of A, deceased, received in bonds, and accepted and acknowledged, is $75,000 00.
   (e) The usual allowance of $15,000 00 for replacements in lieu of depreciation is to be made.
   (f) Efforts are to be made to remove any deficits by obtaining special contributions for this purpose
   (g) All endowment fund income is to be applied to administration.

(h) All building fund income is to be accumulated

2. New subscriptions for 1929 to building fund campaign amount to $27,000 00
3. Pay patients' accounts are considered uncollectible in the amount of $7,421 00
4. Prepaid insurance on December 31, 1929, totals $1,240 00
5. Cost of drugs sold during 1929 amounts to $11,571 00
6. Installment No. 10 on contract for new construction, amounting to $16,500 00, is approved for payment
7. Accrued wages on December 31, 1929, are as follows:

Buildings and Grounds	$1,583 00
Household	1,117 00
Nurses	2,710 00

8. Buildings constructed are transferred from the Building Fund accounts upon completion.

Prepare the adjusting entries and the following statements:

As of December 31, 1929:
Balance Sheet (by funds)
For the year ended December 31, 1929:
General Fund, Principal
General Fund, Income
Endowment Fund, Principal.
Endowment Fund, Income
Building Fund, Principal
Building Fund, Income

Problem 58-5. The city of Dowell classifies its accounts under four different funds. The balances in the accounts of those funds on January 1, 1932, and on December 31 of the same year, before closing, were as follows:

	January 1	December 31
General Fund		
Cash	$ 10,162	$ 21,215
1931 Taxes Receivable	15,676	12,429
Accounts Receivable	2,325	3,545
Stores	9,641	9,533
Permanent Property	3,154,695	3,154,695
1932 Taxes Receivable		60,838
Estimated Revenue from Taxes		225,000
Estimated Revenue from Miscellaneous Sources		62,000
Appropriation Expenditures for Current Purposes		234,398
Appropriation Expenditures for Capital Additions		8,716
Appropriation Expenditures for Payment of Bonds		25,000
Appropriation Encumbrances (1932)....		5,842
	$3,192,499	$3 823,211

	January 1	December 31
Accounts Payable	$ 2,826	$ 5,626
Reserve for 1931 Taxes	10,200	10,200
Reserve for Orders and Contracts	3,286	5,842
Reserve for Stores	10,000	10,000
Current Surplus	11,492	11,603
Bonds Payable	250,000	225,000
Capital Surplus	2,904,695	2,929,695
1932 Tax Anticipation Notes Payable		25,000
Reserve for 1932 Taxes		24,766
Revenue from Taxes		222,894
Revenue from Miscellaneous Sources		64,325
Appropriations		276,000
Estimated Budget Surplus		11,000
Sale of Old Equipment		1,260
	$3,192,499	$3,823,211
Water Fund		
Cash	$ 6,126	$ 717
Accounts Receivable	7,645	5,573
Stores	13,826	12,635
Investments of Replacement Fund	21,700	24,500
Permanent Property	212,604	214,204
Labor and Material Expense		109,638
Interest on Bonds		3,000
Depreciation Charge		10,600
Accounts of Prior Years Written Off		1,097
Expended for Additions to Plant		12,460
	$ 261,901	$ 394,424
Accounts Payable	$ 4,324	$ 4,318
Customers' Deposits	1,500	1,600
Replacement Fund Reserve	21,700	24,500
Operating Surplus	21,773	21,773
Bonds Payable	60,000	40,000
Capital Surplus	152,604	154,204
Services Billed		146,867
Deposits Lapsed		60
Interest on Investments		1,102
	$ 261,901	$ 394,424
Assessment Funds		
Improvement No 50		
Cash	$ 4,653 00	$ 1,844 00
Assessments Receivable	46,829 00	33,414 00
Delinquent Assessments Receivable	4,826 00	2,010 00
Public Benefit Receivable	5,632 00	4,516 00
Interest on Bonds		3,000 00
	$61,940 00	$ 44,784 00
Bonds Payable	$60,000 00	$ 40,000 00
Surplus	1,940 00	1,940 00
Interest on Assessments	—	2,844 00
	$61,940 00	$ 44,784 00

	January 1	December 31
Improvement No 51		
Cash		$ 851 00
Assessments Receivable		21,600 00
Public Benefit Receivable		2,400 00
		$ 24,851 00
Bonds Payable		$ 24,000 00
Surplus		390 00
Interest on Assessments		461 00
		$ 24,851 00
Trust Funds		
Cash	$ 3,216 00	$ 31 00
Investments	94,425 00	99,425 00
Premium on Investments		800 00
Accrued Interest Purchased		260 00
Cemetery Maintenance		849 00
Cemetery Expense		2,976 00
Policemen's Pensions Paid		3,200 00
Firemen's Pensions Paid		2,400 00
	$97,641 00	$109,941 00
Cemetery Endowment Fund Reserve	$60,000 00	$ 60,000 00
Policemen's Pension Fund Reserve	18,691 00	18,691 00
Firemen's Pension Fund Reserve	16,824 00	16,824 00
Cemetery Maintenance Fund Reserve	2,126 00	2,126 00
Profit on Sale of Investments		600 00
Undistributed Income		4,800 00
Policemen's Pension Fund Contributions		4,160 00
Firemen's Pension Fund Contributions		2,740 00
	$97,641 00	$109,941 00

It is the practice of the city to close out the unencumbered balance of appropriations of the general fund at the end of each year Depreciation on the general property of the city is not entered, and accrued interest on investments and outstanding bonds is disregarded Income and profit on trust fund investments are distributed as follows. 62%, to cemetery fund, 20%, to policemen's pension fund, and 18%, to firemen's pension fund, in round dollars.

The cemetery maintenance fund consists of the income from the cemetery endowment fund and is used for cemetery expense Excess of receipts over disbursements of pension funds is closed to the reserve accounts of the respective funds at the end of each year.

Attention is directed to the following facts and conditions at the close of the year 1932:

(1) Taxes for 1931 in excess of the reserve against them are to be written off

(2) The reserve for 1932 taxes is to be increased 50%.

(3) Invoices on all orders and contracts outstanding at the beginning of the year were paid with a saving of $111.00, which

amount was credited to Current Surplus

(4) The old property sold during the year was carried in the accounts at a value of $6,000.00

(5) Permanent property valued at $1,820 00 was discarded during the year

(6) Replacements of water-department equipment costing $6,200 00 were made from the replacement fund during the year at a cost of $7,800 00

On the basis of the foregoing information prepare:

(a) A balance sheet of all funds after closing the books on December 31, 1932

(b) A statement of the current surplus of the general fund for the year, showing revenues and expenditures

(c) A statement of income and expense of the water department for the year

PROBLEM ON CHAPTER 59

Problem 59-1. From the items following, prepare a detailed statement of the condition of the Day Bank and Trust Company as at the close of business on December 31, 1930

The balance applicable to the Undivided Profits account must be determined by the candidate.

Acceptances Anticipated	$ 45,000 00
Acceptances Outstanding	425,000 00
Bank Premises	1,250,000 00
Bonds—Other than U S Government	2,750,000 00
Capital Stock	3,000,000 00
Cash on Hand	600,000 00
Certificates of Deposit	250,000 00
Certified Checks	125,000 00
Christmas Clubs	171,000 00
Commercial Deposits	6,250,000 00
Coupon Deposits	20,000 00
Customers' Liability for Acceptances Executed	425,000 00
Demand Collateral Loans	2,375,000 00
Discounts	4,500,000 00
Dividend Payable—January 1, 1931	30,000 00
Due from Federal Reserve Bank	1,000,000 00
Due from Sundry Banks	350,000 00
Due to Banks	585,000 00
Exchanges for Clearing House	200,000 00
Federal Reserve Bank Stock (50% of subscription)	100,000 00
Furniture and Fixtures	100,000 00
Interest Receivable Accrued	5,000 00
Letters of Credit—Customers' Liability	50,000 00
Letters of Credit Executed for Customers	50,000 00
Miscellaneous Real Estate	75,000 00
Official Checks	46,000 00
Overdrafts	4,000 00
Real Estate Loans	6,250,000 00
Rediscounts	1,500,000 00
Reserve for Contingencies	225,000 00
Reserve for Interest, Taxes, and Other Expenses	60,000 00
Savings Deposits	8,750,000 00
Stock—Other than Federal Reserve Bank Stock	175,000 00
Surplus	1,500,000 00
Time Collateral Loans	3,025,000 00
Undivided Profits (Balance to be determined)	
Unearned Discount	40,000 00
United States Government Bonds	1,250,000 00
United States Government Bonds Pledged	250,000 00
United States Postal Savings Deposits	115,000 00

QUESTIONS AND PROBLEMS ON CHAPTER 60

QUESTIONS

Question 60-1. Why do a broker's records contain a double entry system of security entries as well as the double entry system common to other lines of business?

Question 60-2. Illustrate the money and security entries required to record a purchase and subsequent sale of securities

Question 60-3. Illustrate the money and security entries required to record a short sale and subsequent purchase of securities

Question 60-4. What is the position book, and what is its purpose?

Question 60-5. What is the significance of the credit money balance and the short security balance in the Failed to Receive account?

PROBLEMS

Problem 60-1. *A*, *B*, and *C* are partners conducting a brokerage business and sharing profits in the proportion of 50%, 30%, and 20%, respectively As of the close of business on June 30, 1930, they desire to admit *D* to the partnership, *D* to invest in the firm, in cash, sufficient funds to acquire a one-third interest in the partnership net assets after admission, and to share in profits and losses in the future to the extent of 33⅓%

A post-closing trial balance, taken from the books of the firm as of the close of business on June 30, 1930, follows.

	Debit	Credit
Securities owned	$525,000 00	
Customers' accounts, unsecured	25,000 00	
Customers' accounts, secured	50,000 00	
Accounts with other brokers, secured	150,000 00	
Accounts payable		$ 30,000 00
Collateral loans		90,000 00
A, Capital		300,000 00
B, Capital		250,000 00
C, Capital		80,000 00
	$750,000 00	$750,000 00

For the purpose of determining the partnership net assets, you are to give effect to the following

Market value of securities owned	$465,000 00
Uncollectible customers' accounts	15,000 00
Net depreciated value of furniture and equipment previously expensed by the firm	21,000 00

Required: Amount invested by *D*, partners' capital accounts

Problem 60-2. A partner in a stock brokerage firm, not active in the management, suspects his firm of conducting a bucket shop He secures the following balance sheet from the firm's books, and he asks your advice He has previously made an examination of customers' accounts and found all accounts, both long and short, amply margined at 20%. The market has been rising steadily for nearly a year. What is your analysis of the situation?

Balance Sheet Items

Cash	$ 400,000 00
Due from customers, long	2,500,000 00
Due from brokers for stock borrowed	25,000 00
Securities on hand	75,000 00
Firm trading accounts, long	450,000 00
Due to customers, short	375,000 00
Due to brokers for stock on loan	150,000 00
Firm trading accounts, short	2,850,000 00
Capital, surplus, and profit and loss	75,000 00

Problem 60-3. The following is a trial balance taken from the books of Newkirk and McGilvary, stockbrokers, at the close of business on April 5, 1934.

Cash in Banks	$ 800,000 00	
Petty Cash	2,000 00	
Accounts Receivable	3,690,000 00	
Stocks Borrowed	140,000 00	
Stocks Loaned		$ 180,000 00
Failed to Deliver	95,000 00	
Failed to Receive		147,000 00
Firm Investments	2,000,000 00	
Revenue Stamps	200 00	
Accounts Payable		3,600 00
Accrued Interest		4,501 00
Stock Exchange Seat	165,000 00	
Furniture and Fixtures	1 00	
Expenses	136,000 00	
Income		157,000 00
Loans Payable		2,500,000 00
Frank Newkirk, Capital		2,036,100 00
Maurice McGilvary, Capital		2,000,000 00
	$7,028,201 00	$7,028,201 00

During the audit you ascertained the following·

	Ledger Balances	Market Value of Securities
(1) Customers' debit balances—fully secured .	$3,760,000	$4,200,000
(2) " " " —partly secured	60,000	50,000
(3) " " " —unsecured	36,000	
(4) " free credit balances .	125,000	
(5) " credit balances—securities short	200,000	150,000
(6) " short of securities and no money balances . .	. . .	15,000
(7) Partners' trading debit balances—securities long	180,000	75,000
(8) Partners' trading credit balances—securities short	21,000	45,000
(9) Stocks borrowed	. . . .	150,000
(10) Stocks loaned	.	170,000
(11) Failed to deliver	. . .	93,000
(12) Failed to receive .	.	141,000
(13) Firm investments		
Long	.	1,800,000
Short		150,000
(14) Loans payable to banks, secured by pledge of securities		2,850,000
(15) Market value of securities in the box and in transfer		2,847,000

Prepare a questionnaire form balance sheet

Problem 60-4. Having been appointed to ascertain the financial condition of Snow, Frost & Co , stockbrokers, as at June 30, 1934, you and your staff attended the office of this concern at the close of business on the aforesaid date.

The cash and securities on hand (both in the office and in the safe-deposit vault) were counted and listed and details secured regarding securities in transfer, securities deposited as collateral to loans, those held by other brokers for the firm's account, and those held as margin for customers' accounts as well as customers' short commitments. All these data have since been verified by you.

The books of the firm have been closed, under your direction, as at June 30, 1934, the general ledger showing balances as follows.

Cash	$ 75,000 00
Loans payable to banks	145,000 00
Due other brokers	1,400,000 00
Customers' accounts—Debit	1,450,000 00
Customers' accounts—Credit .	80,000 00
Advances to salesmen	750 00
Securities owned	400,000 00
Stock exchange seat	90,000 00
Partners' capital and undivided profits	390,750 00

The securities, mentioned above as verified, have been valued at market as at June 30, 1934, and the following facts relative to such

valuation have been ascertained:

In office and vault	$ 176,000 00
In transfer	15,000 00
Deposited as collateral for bank loans.	190,000 00
Held by other brokers for the firm's account	1,955,000 00
Owned by firm	495,500 00

An analysis of the customers' accounts and a comparison with the value of the securities held as margin therefor, as well as with the value of customers' short commitments, disclosed the following facts:

(1) The firm held securities having a market value of $1,787,000 00, as collateral for customers' accounts with ledger debit balances amounting to $1,337,500 00

(2) The firm held securities having a market value of $90,000.00, as collateral for customers' accounts with ledger debit balances amounting to $110,000 00

(3) Customers' accounts with ledger debit balances amounting to $2,500.00 were unsecured.

(4) Customers with ledger credit balances amounting to $7,500.00, owed the firm, on account of short sales, securities having a market value of $9,000 00

(5) Customers with ledger credit balances amounting to $42,500 00, owed the firm, on account of short sales, securities having a market value of $32,500 00

(6) Customers' accounts with ledger credit balances amounting to $30,000.00 had no short commitments.

(7) Securities having a market value of $5,000 00, which belonged to customers who had no ledger balances, were included in the securities deposited as collateral for bank loans

From the foregoing, you are required to prepare a balance sheet, showing ledger balances after proper adjustments based on the security valuations, and reflecting the related security values

Problem 60-5. The firm of *A*, *B* & *C* were dealers in securities for their own account and others On November 30, 1931, the partnership was dissolved because *C*, whose only capital contribution was his stock exchange seat, desired to withdraw.

A and *B* formed a new partnership, taking over all assets and liabilities of the firm, except the stock exchange seat and the goodwill. (The latter was considered worthless.)

Profits and losses were shared in the ratio of 60, 25, and 15, by *A*, *B*, and *C*, respectively.

In addition to the trial balance given herewith, which reflects all routine adjustments and accruals, the following information was gathered, as of November 30, 1931:

Customers' free credit balances	$ 202,295 00
Market value of customers' securities short	36,752 00
Market value of firm securities short	29,649 00
Market value of firm securities long	1,008,914 00

Trial Balance—November 30, 1931

Corn Exchange Bank	$ 63,215 00	
National City Bank		$ 750,000 00
Failed to Receive		185,483 00
Stock Exchange Seat	350,000 00	
Goodwill	250,000 00	
Profit on Syndicate Transactions		215,932 00
Loss on Joint Accounts	79,290 00	
Partners' Salaries	51,583 00	
Interest Received		4,592 00
Dividends Received		21,138 00
Stock Clearing Corporation	10,000 00	
Failed to Deliver	148,660 00	
Accrued Interest		2,265 00
Interest Paid	68,232 00	
Interest on Partners' Capital	42,880 00	
Salesmen, Office, and General	255,330 00	
Customers' Ledgers	660,313 00	228,980 00
Petty Cash	852 00	
Brokerage	7,543 00	
Commissions		80,533 00
Firm Securities Long	1,458,664 00	
Firm Securities Short		16,429 00
Bank of America		270,000 00
Revenue Stamps	565 00	
Commissions Receivable	4,843 00	
Commissions Payable		7,556 00
Accrued Income—Syndicates	5,500 00	
Accrued Expense—Syndicates		201,677 00
Capital Accounts		
A		800,000 00
B		350,000 00
C		350,000 00
Drawing Accounts		
A	12,192 00	
B		16,147 00
C	31,070 00	
	$3,500,732 00	$3,500,732 00

From the foregoing data, prepare the opening balance sheet of the new partnership of *A* & *B*, as at December 1, 1931.

MISCELLANEOUS PROBLEMS

Problem 1. Selected Securities, Inc , a corporation organized for the purpose of investing in securities, was managed, during the calendar year 1929, by the Specialized Management Corporation, under an agreement which included the following provisions.

"Specialized Management Corporation agrees to manage the financial operations of Selected Securities, Inc., and to provide, in addition to financial counsel, all necessary office facilities and personnel Expenses, such as interest, taxes, legal and accounting fees, and custody of securities, will be paid by Selected Securities, Inc

"Selected Securities, Inc. agrees to pay the Specialized Management Corporation for its services as financial adviser, etc., 12% of the net profits realized each year and accrued at the close of each year upon securities held. Such compensation shall not be included as an expense in determining the amount of net profit upon which the compensation is payable."

From the following trial balance of Selected Securities, Inc., at December 31, 1929, prepare the journal entries required to bring taxes and management compensation accrued upon the books.

SELECTED SECURITIES, INC.
Trial Balance—December 31, 1929

Cash at Bank...	$ 30,349 02	
Cash on Loan at Call	100,000 00	
Securities (at cost)*	1,628,741 20	
Dividends Receivable	1,250 00	
Cost of Securities Sold	1,369,520 00	
Legal Fees. .	5,000 00	
Auditing Fees	2,600 00	
Interest Paid	8,362 00	
Dividends Paid	4,000 00	
Securities Sold		$1,507,400 00
Dividends Received		28,450 00
Interest Received		9,685 32
Rights Sold		4,286 90
Capital (40,000 shares, no par value)		1,600 000 00
	$3,149,822 22	$3,149,822 22

* The market value of the securities held at December 31, 1929, was $1,657,150 00 All rights sold were in respect to securities which had been sold at December 31, 1929

Prepare also a profit and loss statement for the year ended December 31, 1929, and a balance sheet as at the close thereof

Determine the liquidating value of the company's stock at December 31, 1929.

The income tax rate for 1929 was 11%; in computing the tax, assume that the dividends, $28,450 00, were received from domestic corporations and were therefore tax-exempt; that the interest received, $9,685 32, was not tax-exempt, and that the securities were valued for tax purposes at the lower of cost or market

Problem 2. From the data following, prepare a profit and loss statement for the year ended December 31, 1933. In addition, show the average gross profit per pound, the selling expense per pound, and the average operating profit per pound

	Pounds	Amount
Sales	2,963,915	$988,114 00
Raw Material Consumed	3,342,730	561,715 00
Inventory—Finished Goods—January 1, 1933	285,588	80,894 00
Manufacturing Expenses		383,508 00
Selling Expenses		34,080 00
Waste Recovery		18,694 00

The closing inventory of finished goods was shown as 271,753 pounds, valued at the cost of goods manufactured during the year

Problem 3. On January 1, the inventory at market values of working cattle and live stock on a plantation in the West Indies was as follows:

	Number	Unit Price	Amount
Work animals (bulls and oxen)	1,588	$ 52 00	$ 82,576 00
Horses	16	120 00	1,920 00
Cows	274	30 00	8,220 00
Heifers	137	20 00	2,740 00
Young bulls	220	30 00	6,600 00
One-year heifers (under two years)	82	15 00	1,230 00
One-year bulls (under two years)	127	20 00	2,540 00
Bull calves (under one year)	137	10 00	1,370 00
Heifer calves (under one year)	114	10 00	1,140 00
Breeding bulls	6	150 00	900 00
Together	2,701		$109,236 00

During the year, 73 heifers were reclassified as cows and 175 young bulls as work animals All of them were on hand at the end of the year.

The market values remained the same throughout the year except that work animals were worth $43.00 a head at the end of the year.

During the year, the following changes also took place:

Births	Purchased (all on hand at the end of the year)
145 bull calves	120 work animals at $45 00
130 heifers	41 young bulls at $30 00.
Deaths	Sold:
261 work animals	63 work animals
5 cows	4 cows
4 heifers	2 horses
3 bull calves	
Found	Lost.
8 work animals	7 work animals.
12 bull calves (new)	
5 heifer calves (new)	

Prepare:

(1) A columnar statement showing opening and closing inventories, and number, unit price, and value, in addition to all numerical changes during the year, making such further adjustments as may be necessary.

(2) A statement showing the amount of the opening inventory, the amounts of increases through appreciation, purchase, birth, and so forth, and of decreases through reduction in market value, sales, and losses, thus arriving at the amount of the closing inventory.

Problem 4. The Marvel Corporation is organized on January 1, 1933, to manufacture men's ready-to-wear clothing It is planned to use an estimate cost system, incorporated in the general ledger

(a) The following styles of clothing will be made, and the costs are estimated as follows:

	Style *A*	Style *B*	Style *C*
Materials used	$10 50	$ 8 00	$ 4 50
Supplies (linings, buttons, etc).	3 50	2 80	2 00
Labor	9 00	6 40	4 00
Factory expenses	6 75	4 80	3 00
Total	$29 75	$22 00	$13 50

Note that the estimated costs are divided into four sections and that the accounts must be kept to record the corresponding subdivisions of operating costs

(b) The company starts with the following:

Machinery and Equipment	$20,000 00	
Cash	30,000 00	
Capital Stock. . .		$50,000 00

(c) The purchases and expenses for the first month according to the voucher record are:

Materials, fine woolens, 2,000 yards @ $3 20	$ 6,400 00
Materials, plain woolens, 3,000 yards @ $1 40	4,200 00
Rent of factory	500 00
Linings, buttons, thread, etc	3,100 00
Salesmen's commissions	750 00
Office expenses	320 00
Repairs to machines and equipment	150 00
Electric power	440 00
Oil, waste, and other factory supplies	225 00
	$16,085 00

(d) The payrolls are summarized as follows:

Foremen	$ 450 00
Tailors, cutters, etc (direct labor)	4,900 00
Office and salesmen's salaries	950 00
Inspectors' and other indirect factory wages	735 00
	$7,035 00

(e) The depreciation on equipment is calculated at 1% per month

(f) The cutting-room foreman reports that the following materials have been taken from stock and cut for use on garments in process.

1,500 yards of fine woolens.
2,500 yards of plain woolens.

(g) The tailoring foreman reports that the following garments have been finished and placed in stock:

Style *A*—250 pieces.
Style *B*—200 pieces.
Style *C*—350 pieces

(h) The sales record is as follows:

Invoice No 1, Style *A*—100 pieces	$ 4,000 00
" , Style *C*—150 pieces	3,000 00
No 2, Style *B*— 50 pieces	1,500 00
No 3, Style *A*—100 pieces	4,000 00
No 4, Style *B*— 25 pieces	800 00
" , Style *C*—100 pieces	2,100 00
	$15,400 00

(i) Make an entry for cost of sales.

(j) The amount of cash received from customers was $7,000 00.

(k) The amount of cash paid out was: for wages, $7,035 00; for

other vouchers, \$9,040 00.

(l) Inventories at the end of the month (in addition to stocks of raw materials and finished goods as shown by the stock records) are as follows·

Supplies, \$470 00
Unfinished goods:
Style A—100 pieces
All material cut
All supplies provided
Labor half completed.
Style C—50 pieces:
All material cut.
Half of supplies provided.
Half of labor finished.

(1) Submit a working trial balance covering the above transactions

(2) Prepare a balance sheet and a profit and loss statement for the month When preparing the profit and loss statement, add or deduct from cost of sales, the unabsorbed labor, expenses, and so forth

(3) Show how balances of closing inventories are made up.

Problem 5. Corporation A has contracts with its sales and production managers whereunder each of the latter is to receive, as extra compensation, 2½% of the net book profit of the company for the calendar year 1926, after provision for Federal income taxes has been made.

The net book profit for the calendar year 1926, before provision for the extra compensation and for Federal income taxes, was \$95,000 00. There were, however, deductions amounting to \$5,000 00, that had been made in determining the net book profit as stated above, which were unallowable for income tax purposes

From the foregoing data, compute the amount of Federal income tax payable by the corporation and the amount of extra compensation payable to each of the managers. (The tax rate for 1926 was 13½%)

Problem 6. In preparing a balance sheet, to be used in proposed refinancing of a company engaged in the production of wine, which has maintained rather incomplete records, what amount would you use as the value of finished wine on hand, on the basis of the following data?

With respect to the inventory of wine on hand you are able to

determine the following:

(1) The average cost of grape juice was $1.55 per gallon, which approximates present market cost
(2) The average cost of brandy, of which 5 gallons were used per 50-gallon barrel of finished wine, was $3 75 per gallon
(3) Filtration loss was stated to be, in the aggregate, about 4 gallons to each 50 gallons of grape juice, the Federal Government allowed 6%.
(4) The total labor cost to produce 40,000 gallons in one year was $18,000 00
(5) The cost of a 50-gallon barrel was $5 50.
(6) The plant overhead was about ⅓ of the labor cost.
(7) Shrinkage averaged about 1% per annum
(8) Carrying charges averaged about 6% per annum.
(9) Of the 20,000 gallons of wine on hand, 5,000 gallons were 15 years old, and 15,000 gallons were 6 years old.

Submit a work sheet and explain your reasoning.

Problem 7. The following condensed balance sheets reflect the financial condition of the East Company and the King Company on October 15, 1933:

	East Company	King Company
Investment in East Company (20%)	.	$ 45,000 00
Investment in King Company (15%)	$ 45,000 00	
Other Net Assets	130,000 00	195,000 00
Capital Stock and Surplus	$175,000 00	$240,000 00

A company with capital stock of $325,000 00 (the amount of the "Other Net Assets") is organized to combine these two companies. What proportion of the stock should be issued to the outside stockholders of the East Company, who own 80% of the stock of that company, and what proportion should be issued to the outside stockholders of the King Company, who own 85% of the stock of that company?

Problem 8. On June 1, 1933, Louis Small bought a small manufacturing business for a cash consideration of $30,000.00. He received the following assets free and clear of all liabilities:

Machinery, which had cost $25,000.00 and which was considered as worth $20,000 00, lumber, which had cost $7,000 00, and was worth $6,000.00 at the market prices then prevailing, and other raw material, which was worth $1,000 00 at cost and at market.

Small was not to receive any interest in the accounts receivable, but he undertook to collect them for the former owners.

Between June 1 and August 31, 1933, no regular books were kept, and on the latter date Small asks you to open a simple set of books which will record the totals of his transactions to date He also asks you to prepare a balance sheet. He is able to supply the following information from memoranda he has kept:

Cash collections.	
On old accounts receivable	$3,500 00
On new accounts receivable	8,000 00
Cash disbursements:	
Wages	$2,500 00
Other factory expenses	300 00
Paid former owners on account	2,000 00
Collection expenses on old accounts.	100 00
Material purchases	5,000 00
Open items at August 31, 1933	
Old accounts receivable uncollected	$2,250 00
New accounts receivable uncollected	5,710 00
Factory expenses unpaid	225 00
Material bills unpaid	1,900 00
Cash on hand—August 31, 1933	1,410 00
Material on hand—August 31, 1933 at market price, $5,800 00, at cost	$6,500 00

Prepare the journal entries necessary to record the transactions to date, and a balance sheet on August 31, 1933.

Problem 9. The books of Bokar Corporation, a concern engaged in the manufacture of foundry castings, show, after inventory, December 31, 1934, materials and finished work on hand as follows.

Pig iron, $8,500.00; heavy scrap iron, $350.00; foundry scrap, $105 00; coke, $840 00, limestone, $90 00, other materials, $690.00, and finished castings, $3,065 00.

Inventory—January 1, 1934, as follows: pig iron, $12,600 00; heavy scrap iron, $600 00; foundry scrap, $150 00; coke, $254.50; limestone, $65 00; other materials, $3,140.00; and finished castings, $1,875.00.

Purchases during the year, as follows. pig iron, $115,600 00; heavy scrap iron, $7,400 00, foundry scrap, $825.60; coke, $12,-000.00, limestone, $375 00; and other materials, $7,725.00. Cash discount on purchases, $2,340 60; freight, $810 80

The sales were $230,000 00, cartage outward, $1,965.10; discount on sales, 1%; taxes, $325 00; insurance, $175.00; labor, $60,250 00; foundry foreman, $3,100 00, office salaries, $2,500 00, salesmen's salaries and expenses, $15,250 00, and office expenses, $8,010 00.

Depreciation on plant, $4,000 00.

Prepare a statement showing production cost and year's profit from operations.

Problem 10. The books of The Devoe Company had been audited as of December 31, 1934, as of which date the auditors found adjustments necessary for the following:

Repairs charged in error to the Machinery and Equipment account	$ 3,500 00
Required provisions for depreciation for the year 1934	
Buildings	2,100 00
Machinery and Equipment	12,000 00
December pay roll entered on books in January, 1935	
Factory Labor	5,200 00
Administrative and Office Salaries	2,000 00
Salesmen's Salaries	500 00
Overstatement of inventory	8,050 00

A merger with Thorne Company, under the new name of The *D-T* Company, was effective as of June 30, 1935, and in connection therewith the auditors were again called in to prepare a balance sheet as of that date, together with an operating statement for the six months then ended. The auditors found that the adjustments recommended as of December 31, 1934, had not been entered on the books. The trial balance taken from the books as of June 30, 1935, was as follows:

Cash	$ 14,500 00	
Accounts Receivable	66,000 00	
Inventory	165,500 00	
Unexpired Insurance	2,000 00	
Land	10,000 00	
Buildings	85,000 00	
Machinery and Equipment	150,000 00	
Notes Payable		$ 100,000 00
Accounts Payable		28,000 00
Reserve for Doubtful Accounts		5,000 00
Capital Stock		250,000 00
Surplus		91,500 00
Sales		531,000 00
Discount Earned		3,500 00
Factory Labor	195,000 00	
Purchases	202,000 00	
Factory Supplies and Expense	1,000 00	
Insurance	2,500 00	
Maintenance—Building and Equipment	27,000 00	
Taxes	7,000 00	
Administrative and Office Salaries	35,000 00	
Advertising	7,500 00	
Miscellaneous and General Expense	9,000 00	
Salesmen's Salaries	12,800 00	
Traveling Expense	8,200 00	
Discount Allowed	8,000 00	
Interest Expense	1,000 00	
	$1,009,000 00	$1,009,000 00

No attempt had been made by the bookkeeper to adjust the prepaid and accrued accounts as of June 30, 1935; the correct amounts follow:

Accrued Taxes	\$2,100 00
Unexpired Insurance	2,800 00

The property additions for the six months were found to have been properly capitalized Depreciation is to be allowed on the annual basis of 3% on buildings and 10% on machinery and equipment, figured on the June 30, 1935, balances The inventory, as checked by the auditors, aggregated \$185,000 00

In connection with the merger with Thorne Company, it was planned to sell preferred stock in an amount sufficient to liquidate the notes payable and provide \$150,000 00 additional working capital, the balance of the stock to be 50,000 shares of common stock without par value It was agreed to allot the common stock to the two participating companies at the rate of four no-par shares for each \$100 00 of net worth, with the balance of the shares (valued at \$10.00 each) to be allotted as payment for goodwill, on the basis of the excess of the net earnings for the one and one half years ended June 30, 1935, over 10% on the net assets as of June 30, 1935.

The audited earnings of the two companies for the period involved had been as follows.

	Thorne Company	Devoe Company
1934	\$41,685 00	\$10,635 00
Six Months Ended June 30, 1935	20,000 00	

The balance sheet of Thorne Company, accepted for allotment of stock under the merger, was as follows:

Cash	\$ 20,500.00
Accounts Receivable	85,250 00
Inventories	58,240 00
Plant and Equipment	150,500 00
Deferred Charges	6,015 00
	\$320,505 00
Accounts Payable	\$ 25,965 00
Reserve for Depreciation	35,840 00
Capital Stock	50,000 00
Surplus	208,700.00
	\$320,505 00

Prepare:

(1) A balance sheet of the Devoe Company as of June 30, 1935, after necessary adjustments have been made

(2) An operating statement of the Devoe Company for the six

months ended June 30, 1935

(3) A schedule showing the number of shares of common stock of The *D-T* Company to be allotted to the two companies, under the merger plan as outlined.

(4) Working papers showing the opening balance sheet of The *D-T* Company

Problem 11. Prepare a balance sheet as at December 31, 1933, and a profit and loss account for the year ended that date.

COMPANY *A*, INC.

Trial Balance—December 31, 1933

	Debit	Credit
Cash	$ 260,000	
Accounts Receivable—Customers	520,000	
Furniture and Fixtures	20,000	
Depreciation Reserve—Furniture and Fixtures		$ 2,000
Auto Trucks	60,000	
Depreciation Reserve—Auto Trucks		20,000
Accounts Payable—Trade		45,000
Accrued Pay Roll and Property Taxes		10,000
Capital Stock (authorized and issued, 55,000 shares)		777 000
Sales		720,000
Purchases—Lumber, Steel, etc	430,000	
Wages	225,000	
Depreciation—Auto Trucks	20,000	
Depreciation—Furniture and Fixtures	2,000	
Lease Rentals	25,000	
Selling and Administrative Expenses.	12,000	
	$1,574,000	$1,574,000

Company *A*, Inc. rented display equipment on contract, and had obtained contracts for $720,000 00, covering a period of three years from January 1, 1933 The contracts provided that the company would bill for the earned portion of the contract price at the rate of $20,000.00 at the end of each month, beginning January 31, 1933.

The display equipment available for rental was constructed entirely by Company *A*, and during the month of January, 1933, such equipment was produced at a cost of $600,000 00, with an estimated average productive life of five years

The locations on which the display equipment was erected had been leased to Company *A* for a period of five years from January 1, 1933, and the leases specified that rents for the full period were payable in advance on January 1, 1933

All display equipment owned by Company *A* was in use under the contracts noted Maintenance of this equipment in efficient operating condition cost the company $55,000.00 annually.

Problem 12. The *X* Company sells a loose-leaf service for $115.00 and contracts to issue to customers, semiannually on April 1 and October 1, renewal and replacement pages for $15 00 per annum

The initial purchase price covers the original publication and one year's renewal pages, and customers are billed in advance for each subsequent year's renewal pages on the anniversary dates of the original sales.

The company's books at December 31, 1931, showed the following transactions:

Sales of original publication (uniformly 200 sets a month), 2,400 sets @ $115 00	$276,000.00
Sales charges for renewal pages, 4,500 sets @ $15 00	67,500 00

Sales of original publication for preceding years were:

	Number of Sets Per Month
1927	50
1928	75
1929	100
1930	150

The production cost of the original publication was $30.00 per set, and that of renewal pages, $2 50 per semiannual issue.

In closing its records for the year 1931, the company credited the foregoing sales of both categories to profit and loss, in accordance with the uniform practice followed since the initiation of this particular department

As auditor, would this procedure meet with your approval? State what modifications you would suggest, showing the actual gross profits from both sources for the year 1931, and the adjustments applying to other periods

Problem 13. In the production of a main product and its one by-product, a manufacturer utilizes six production departments. Raw material, when placed in process, passes first through the reduction department, in which it is fused into a clinker mass. It then passes to the grinding department and next to the mixing department From the mixing department it passes to the extraction department, at which point the by-product emerges Both products next pass to the finishing department and to the packing department

Raw material is composed of two elements, as follows:

Y 55% costs $ 70.00 per ton.
X: 45% costs 110.00 per ton.

In the mixing department, chemicals (equal in total weight to the materials previously used) are added, as follows:

A. 25% costs $ 40.00 per ton
B· 60% costs 80 00 per ton.
C· 15% costs 160 00 per ton.

Material storage and handling cost is computed at 8% of material cost

Direct labor cost is computed on tonnage handled in each department

Direct department expense and indirect department expense are computed as a percentage of direct labor cost

The following are the direct labor costs and expense percentages·

Department	Direct Labor Per Ton of Main and By-products	Direct Department Expense	Indirect Department Expense
Reducing	$20 00	40%	30%
Grinding	22 00	150	30
Mixing	30 00	250	30
Extraction	24 00	200	30
Finishing	60 00	60	30
Packing	36 00	40	30

In the extraction process, 80% of material placed in process becomes main product Of the remaining portion, which is sent to the finishing department along with the main product, two thirds emerges as completed by-product There is no loss in finishing the main product.

It takes approximately twice as long to finish a ton of the by-product as it does to finish a ton of the main product

The by-product is sold at a net profit of $96 00 per ton, after consideration has been given to its share of factory costs. No commercial expenses are assigned to the by-product.

The main product is sold for $900.00 per ton. It is charged with commercial expenses at the rate of 15% of sales price.

Determine the cost per ton of the by-product and the profit per ton of the main product sales.

Problem 14. From the information following, prepare:

(1) The journal entries, as required, on the books of the three companies, recording the purchase of the investments at April 1, June 30, and September 1, 1929

(2) A statement showing the amount of goodwill and capital surplus arising from consolidation, as at December 31, 1929.

In making an audit of the books of account and records of the Smith Theatre Company and its subsidiaries—the Brown Pictures, Incorporated, and the Green Amusement Company—for the year ended December 31, 1929, you find the following conditions:

The Brown Pictures, Incorporated (hereafter alluded to as "the corporation"), was organized on January 1, 1929 The incorporators, owners of theatres in favorable locations, leased their theatres, with equipments, to the corporation for a period of twenty years beginning January 1, 1929, and received, in consideration therefor, all the capital stock of the corporation, in addition to an annual fixed rental payable by the lessee in advance in equal monthly installments on the first day of each month

The capital stock of the Brown Pictures, Incorporated, consists of 10,000 shares of no par value and was issued, according to the articles of incorporation, for leaseholds appertaining to the leased theatres, appraised by the incorporators at date of organization at \$120,000.00 With reference to the issue of the stock, you find the following journal entry on the books of the corporation:

Leaseholds	120,000 00	
To Capital Stock		120,000 00

You also find that, during the year 1929, the corporation has amortized the leaseholds by charges to the Profit and Loss account on the basis of the lives of the leases.

On April 1, 1929, the Smith Theatre Company purchased from individual stockholders of the Brown Pictures, Incorporated, 5,000 shares of the capital stock of that corporation for \$70,000 00 in cash, and on September 1, 1929, acquired from the remaining stockholders the balance of the stock, which was paid for in the following manner:

(a) One hundred shares of the Smith Theatre Company's no-par value common stock held in the treasury, purchased at \$35.00 a share, the market value being \$45.00.

(b) A sum in cash equal to the increase in the rental under an amendment of the lease of the Star Theatre, one of the theatres originally leased to the Brown Pictures, Incorporated, which had been rented by the Brown Pictures, Incorporated, at date of organization from the stockholders now desirous of selling their stock. The original Star Theatre lease agreement provided for a rental of \$60,000.00 per annum and stipulated that the corporation deposit with the lessors the sum of \$60,000.00, bearing interest at 6% per annum, which was to be applied as rental for the last year of the term. The deposit

was made by the corporation on January 1, 1929 The amended lease agreement contained the following provisions.

Term—October 1, 1929, to December 1, 1948.
Rental—$72,000 00 per annum from Oct 1, 1929, to Sept 30, 1939
$70,000 00 per annum from Oct 1, 1939, to Dec 1, 1947 (payable as in the case of the first lease)
$60,000 00 for the balance of the term, covered by the lease deposit originally made by the lessor.

The original lease was canceled and settlement for the lease deposit was made in cash

(c) Cancellation of the interest accrued on the lease deposit from January 1, 1929, to September 1, 1929, the amount thereof to be credited to the Brown Pictures, Incorporated.

The Green Amusement Company was organized on January 1, 1929, with an authorized capital stock of 1,000 shares of no par value issued for cash, in amount of $35,000.00. This company was indebted to the Smith Theatre Company on a note with a face value of $15,000.00 Owing to the unsatisfactory financial condition of the Green Amusement Company, the Smith Theatre Company accepted the note only after indorsement thereof by 95% of the stockholders of the Green Amusement Company.

With the consent of the Smith Theatre Company, the indorsers of the note, anxious to free themselves of their contingent liability, which was likely to become actual, entered into an agreement on June 30, 1929, with the Brown Pictures, Incorporated, whereby they sold to that corporation all their capital stock of the Green Amusement Company, upon condition that the Smith Theatre Company cancel the note and that the Brown Pictures, Incorporated, assume the liability therefor on open account

The books of the respective companies were closed quarterly. An analysis of the surplus accounts at December 31, 1929, was as follows:

	Smith Theatre Co	Brown Pictures, Inc	Green Amusement Co
Balance—Jan 1, 1929 (as certified by you)	$ 840,000		
Profits or losses*			
3 months ended Mar 31, 1929	150,000	$120,000	$ 5,000*
3 months ended June 30, 1929	140,000	130,000	9,000*
3 months ended Sept 30, 1929	175,000	135,000	12,000*
3 months ended Dec 31, 1929	178,000	140,000	15,000*
Balances—December 31, 1929	$1,483,000	$525,000	$41,000*

The capital stock of the Smith Theatre Company consists of 10,000 shares of no-par value common stock, issued at $15.00 a share

Wherever it becomes necessary, in your calculations, to assume an interest rate, use 6% per annum

The profits or losses for the three months ended September 30, 1929, may be assumed to have occurred in equal amounts by months

Given: The present worth of an annuity payable $1 00 monthly for ten years, the first payment to be made in one month, is $90 075. The present worth of an annuity payable $1 00 monthly for eight years and two months, but with the first payment of the annuity beginning in ten years, or directly after the former annuity ceases, is $42 500083.

Problem 15. Following is the trial balance of the recently organized Glenview Golf Club as at December 31, 1933.

	Debit	Credit
Cash in Bank	$ 7,225 00	
Accounts Receivable, Members	11,160 00	
Buildings	54,500 00	
Equipment	8,500 00	
Golf Course Construction	130,000 00	
Labor	26,285 00	
Golf Course Supplies and Expense	12,446 00	
General Expense	4,213 00	
Interest Paid	5,617 00	
Rent	6,000 00	
Commissions—Soliciting Membership	1,100 00	
Notes Payable—Bank		$ 10,000 00
Accounts Payable		2,341 00
Entrance Fees		146,250 00
Dues		22,950 00
Green Fees		5,015 00
Taxes on Dues and Entrance Fees		490 00
Entrance Fees Underwritten		80,000 00
	$267,046 00	$267,046 00

A proprietary membership in the club costs $1,000.00 plus a $100 00 tax.

An analysis of the Entrance Fees account shows that it includes $110,000 00 paid in—which amount represents the payment in full of 110 memberships—and $36,250.00 collected from sixty members The balance due from these sixty members, plus the tax thereon, is secured by notes for their original unpaid balance. These notes are on hand but not entered

In September, 1933, a special committee, appointed for the

purpose, handed in a statement with a list of eighty members, each of whom promised to obtain a new member and to advance the entrance fee of such member at once, subject to repayment when the new member paid in his fee; accordingly, the following entry was then made:

Accounts Receivable, Members	80,000 00	
To Entrance Fees Underwritten		80,000 00

Of the above \$80,000 00, \$70,000 00 had been collected from the underwriters at December 31, 1933 Nothing had been repaid to the underwriters on account of new members, although ten such new members had been elected in December and had paid in \$8,800 00 in cash and signed notes for \$2,200.00 for entrance fees and taxes.

Dues are \$200 00 a year, plus a 10% tax, payable quarterly in advance, and have been chargeable and entered on April 1, July 1, and October 1, 1933

Included in "Accounts Receivable, Members" are accounts totaling \$330 00, for dues and taxes against two members who have been delinquent for nine months, and accounts aggregating \$770.00, for dues and taxes of eight other members Collections can be enforced only by deduction from the proceeds of sale of such memberships after the complement of 300 members has been attained

The Buildings account includes:

Caddy and locker house	\$10,000 00
Architect's plans for a club house, discarded because the proposal appeared too expensive	3,000 00
Architect's fees for new club house	1,500 00
Payments under a cost-plus contract for the club house (under construction December 31, 1933), with a guaranteed maximum cost of \$50,000 00	40,000 00
	\$54,500 00

The golf course was finished and opened on June 30, 1933 At that date, the club being obliged to maintain the course, since the original construction contract was completed, the operating accounts stood as follows:

Debits	
Labor	\$10,116 00
Golf course supplies and expense	4,539 00
General expense	916 00
Interest paid	2,890 00
Rent	6,000 00
Credits:	
Dues	5,950 00

The club leases its real estate, for which it pays an annual rental of $6,000 00, payable January 1 in advance

The estimated life of the equipment is five years from June 30, 1933

Of the liability on the books for taxes on dues, $390 00 is now payable to the collector of internal revenue, representing collections in December

Prepare the journal entries which should be made on the books as of December 31, 1933, and January 1, 1934, disregarding closing entries, since the fiscal year ends on June 30.

Submit also a statement of assets and liabilities as of the opening of business on January 1, 1934.

Problem 16. You are engaged by a firm of attorneys to advise and aid in a general reorganization of their offices, with particular reference to accounting procedure, cost, and so forth

Upon investigation you find that it has been the practice to keep a chronological record of hours spent upon each undertaking and, upon completion of a matter, to bill the client from this record, taking into consideration preestablished minimum rates per hour for the various partners and attorneys, the nature of the work, and so forth.

The operations of the firm as a whole result in a profit, but no attempt beyond rough estimates has ever been made to determine the cost per hour to the firm of each member of the staff. Further investigation leads you to believe that much individual work is done at less than cost

You discuss the situation with the firm members, and you are requested to prepare for their consideration a comparative table showing the direct, overhead, and total costs per hour to the firm of each partner and attorney, in comparison with the minimum billing rates in effect.

Construct the required table from the above information and the following data:

(a) The three partners are actively engaged in the practice of law

(b) The legal staff, including the partners, numbers nine, and may be designated by numbers in your solution, numbers 1 to 3 being the partners.

(c) The normal working year per man is conceded to be 1,981 hours, and 181 hours per annum are considered a reasonable allowance per man for all non-chargeable time

(d) The partners draw $1,000 00 each per month, which sum they consider as salary. The annual salaries of the

members of the legal staff are

Number 4—$5,400.00	Number 7—$3,600.00.
" 5— 4,800 00.	" 8— 3,600 00.
" 6— 4,200.00.	" 9— 2,400 00

(e) The minimum billing rates per hour are: Numbers 1, 2, and 3, $10 00; Number 4, $7.50, Number 5, $6.50; Number 6, $4.50, and Numbers 7, 8, and 9, $3.00.

(f) The firm's actual expenses for the year under review (exclusive of partners' drawings) were as follows:

Salaries	
Legal Staff	$24,000 00
Stenographers	15,641 00
Others	8,155 00
Rent	18,301 00
Stationery and Supplies	3,730 51
Telephone and Telegraph	3,101.15
Depreciation	2,514 63
Miscellaneous Expenses	3,066.98
	$78,510 27

Problem 17. The Pine Lumber Company is the owner of a tract of timber, of which it is estimated there will be 1,330,000,000 feet remaining to be cut at January 1, 1931 The company intends to cut off this timber and manufacture it over the ensuing ten years, and its present plant, main-line railroad, and equipment, allowing for normal replacements, may be assumed to be adequate for that purpose.

In the analysis of the accounts for the three years ended June 30, 1930, the following items of expenditure were shown:

New plant extension. ..	$385,750 00
Plant and main-line railroad replacements	101,070 00
Equipment replacements	116,480 00
Construction of logging spurs	217,300 00
Total	$820,600 00

Plant and main-line railroad replacements as given above may be considered normal for a three-year period under the usual operating conditions. Equipment replacements may likewise be assumed to be normal, but it is to be expected that necessary purchases of new equipment will depend upon the number of feet cut.

It is estimated that the construction of logging-railroad spurs into 1,000,000,000 feet of the remaining timber will cost $900,000.00; spurs already constructed are available for logging 330,000,00 feet.

The company's operations for the three years from June 30, 1927, to June 30, 1930, during which it manufactured 364,000,000 feet of lumber, are summarized as follows:

Net sales of lumber and inventory adjustments		$8,736,000.00
Cost of sales		
Logging, manufacturing labor and expense	$6,576,770 00	
Amortization of logging-railroad spurs	172,900 00	
Depreciation—plant and main-line railroad	213,500 00	
Depreciation—equipment	133,910 00	
Depletion of timber	728,000 00	7,825,080 00
Gross profit		$ 910,920 00
Selling and administrative expenses, taxes, etc		976,230 00
Operating loss		$ 65,310 00
Interest paid		158,850 00
Net loss for the three-year period		$ 224,160 00

In order to liquidate all of its present indebtedness, the company is about to negotiate a loan for $1,000,000 00, to be dated January 1, 1931, with interest at 6% per annum on the unpaid balance, the principal payable in ten equal annual instalments beginning December 31, 1931.

Using as a basis, sales prices and expenditures as experienced for the three years to June 30, 1930:

Prepare a statement of the "conversion value" of the timber remaining at January 1, 1931—that is, the cash funds to be realized from the operations of the company, available for liquidation of the principal under the proposed loan or for other purposes. Calculate the "conversion value" or cash funds to be realized per thousand feet of timber to be cut, making your computations to the nearest tenth of a cent.

Prepare also a statement comparing payments to be met in each year under the proposed loan with the cash funds to be available each year, assuming that all the timber will be cut and manufactured in equal annual amounts

Note The foregoing relates to the determination of "conversion value," now commonly required by long-term creditors of timber operators, and requires statements other than the orthodox balance sheet and profit and loss statement

Problem 18. From the following trial balance and explanatory data, prepare:

(a) A balance sheet as of December 31, 1930.

(b) A statement of operating cost for the year ended December 31, 1930.

(c) A statement of profit and loss for the year ended December 31, 1930

SAMOSET LOGGING COMPANY—CAMP NO. 1

Trial Balance—December 31, 1930

	Debit	Credit
Cash in Bank	$422,500 00	
Petty Cash	1,750 00	
Accounts Receivable	165,450 00	
Inventories		
Cook house	250 00	
Wangan*	150 00	
Standing Timber (Stumpage)	157,800 00	
Clearing Cost	2,400 00	
Machinery and Equipment (Rigging)	22,400 00	
Tools (Felling and Bucking)	1,250 00	
Cable (Rigging)	8,200 00	
Skidroads (Rigging)	29,000 00	
Office Fixtures	1,500 00	
Notes Payable		$ 50,000 00
Accounts Payable		18,750 00
Payrolls Accrued		37,100 00
Bonds—6%		100,000 00
Capital Stock		500,000.00
Labor	59,400 00	
Rigging Maintenance	4,850 00	
Sundry Operating Expenses	900 00	
Cook house Purchases	12,350 00	
Cook house Sales		15,250 00
Wangan Purchases	1,210 00	
Wangan Sales		1,320 00
Log Sales		185,200 00
Salaries—Administrative	10,000 00	
Office Expenses	2,550 00	
Sundry Expenses—General	710 00	
Bond Interest	3,000 00	
	$907,620 00	$907,620 00

* *Wangan* A flatboat used by Maine lumbermen for transporting their tools and provisions

You obtain the following additional information:

(1) There was no inventory of logs on hand at January 1, 1930, either in wood or in water.

(2) The estimate of the tract contents was 60,000,000 feet.

(3) During the year, 26,040,000 feet were logged, and 25,470,000 feet were rigged (placed in heaps or piles)

(4) Inventories at December 31, 1930, were:

	Dollars	Feet
Cook house	$300 00	
Wangan	160 00	
Logs in heaps or piles		2,320,000
Logs felled and bucked		570,000

(5) Logs sold—23,150,000 feet.

(6) The Labor account was analyzed as follows:

Felling and bucking	$17,100 00
Rigging	36,550 00
Cook house	3,540 00
Wangan	2,210 00
Total	$59,400 00

(7) Bond interest is payable semiannually, July 1 and January 1, and the dividend declared is 3%.

Depreciation of furniture and fixtures is to be provided on the basis of footage sold. Depreciation of other fixed assets is to be provided in proportion to footage handled

Divide the net costs of operating the cook house and the wangan, and the sundry operating expenses into two equal amounts, charging half to felling and bucking and half to rigging.

EXPLANATORY NOTES

A logging company buys timberland (standing timber), cuts it down, saws it into logs, and sells the logs.

The timber is first "cruised" by an expert, who reports upon the approximate amount and condition of each kind of timber on each section

The land may be sold for a lump sum, at so much per acre or so much per thousand feet logged.

When the land is close to a river, the skidroad process is employed; if it is too far away from a river, railroads are built. Frequently, the combination process is used.

When a section "goes under the axe," a camp is built, a road cleared, and skidroad or railroad, or both, constructed The cost is spread over the section cleared, since such equipment is worthless when this particular part is exhausted.

The processes employed are felling, bucking (sawing into logs), branding (a different mark being used for each section), logging, and hauling—over skidroad, by railroad to a landing on a river bank, or direct to the mill If the logs are dumped into a river, a boom, owned generally by an outsider, is necessary for sorting.

The logs, rafted or railroaded to the mill, are then graded and measured by both owner and buyer As soon as the content of either raft or car is determined, the mill sends the owner (logger) a credit memorandum for it.

Problem 19. Following are the condensed balance sheets of Companies *A*, *B*, *C*, and *D*, as at the close of business, December 31, 1930:

	A	B	C	D
Assets				
Cash	$ 10,000	$ 20,000	$ 4,500	$ 20,000
Accounts Receivable	90,000	180,000	145,000	280,000
Accounts Receivable from *B*	40,000			
Accounts Receivable from *C*		50,000		
Accounts Receivable from *D*			75,000	
Inventories:				
Raw Materials	75,000	100,000	90,000	100 000
Finished Goods	60,000	70,000	80,000	90,000
Investments:				
Capital Stock of *A*				50,000
Capital Stock of *B*	50,000			50,000
Capital Stock of *C*		100,000		50,000
Capital Stock of *D*.	10,000			
Plant and Property	1,580,000	1,970,000	2,175,000	3,110,000
	$1,915,000	$2,490,000	$2,569,500	$3,750,000
Liabilities				
Notes Payable	$ 90,000	$ 100,000	$ 160,000	$ 220,000
Accounts Payable to *A*		40,000		
Accounts Payable to *B*.			50,000	
Accounts Payable to *C*				75,000
Capital Stock	1,000,000	1,400,000	2,000,000	3,000,000
Surplus	825,000	950,000	359,500	455,000
	$1,915,000	$2,490,000	$2,569,500	$3,750,000

The capital stock of the several companies owned by the other companies was purchased at par and is in each instance carried on the books at cost.

A consolidation is proposed and decided upon, and the *N* Banking Company is engaged to make the necessary arrangements for this purpose. The banking company succeeds in securing agreements from the stockholders of the four companies, *A*, *B*, *C*, and *D*, all complying with the terms of the proposal whereby a new company is to be organized and known as the *X Y* Company.

During the past five years, dividends have been paid annually as follows. *A*, 16 55%; *B*, 17%, *C*, 15%; and *D*, 12½%. It is agreed to allow goodwill to the companies equal to the amount of dividends paid by each company during the past five years. It is further agreed that the return of all merchandise sold to, and bought by, one or other of the companies, be accepted and that the full price paid therefor be allowed The average percentage of net profit on intercompany sales has been. *A*, 20%; *B*, 30%, *C*, 25%, and *D*, 35%.

All of the raw materials of *D* were bought from *C*; those of *C* were bought from *B*; and those of *B* were bought from *A* *A* purchased its raw materials in the open market.

The inventories of all companies have been carried on the books at cost.

The X Y Company's authorized capital stock is to consist of 2,000,000 shares of no par value. The stockholders of A, B, C, and D have agreed to accept 1,500,000 shares, in return for their own stock and holdings of the other companies, which are to be issued at the nominal value of \$10 00 each, in payment of their individual interests in the respective companies Five hundred thousand shares are to be held for sale by the N Banking Company, at not less than \$10 00 a share

The estimated amount of reorganization and financing expenses is \$2,000,000.00, which sum is to be paid from the proceeds of the sale of the stock held by the banking company. The balance of the proceeds of the sale of the stock is to be turned over to the X Y Company as additional working capital.

From the foregoing, after effect has been given to the transactions enumerated, prepare:

(1) A balance sheet of the X Y Company, to submit to the clientele of the N Banking Company for investment purposes.

(2) A statement of the amount of shares of capital stock that will be received by the holders of stock of A, B, C, and D, respectively

Problem 20. A fire insurance company is formed on January 1, 1933, with a capital stock of \$500,000 00 and paid-in surplus of \$250,000 00. It expects to conduct a business that will result in a premium income (after deducting reinsurance and return premiums) for the first two years of \$360,000.00 and \$450,000.00, respectively, and of not less than \$630,000.00 for each succeeding year.

It is desired to keep the commission cost within 25% and the other operating expenses at \$100,000 00 each year.

For the purpose of the reserve for unearned premiums, it may be assumed. (a) that June 30 is the average date of expiration of all premiums; and (b) that the premium income is equally divided between one-year, three-year, and five-year policies. For the purpose of interest, you may assume that the company received from its investments, \$40,000 00 the first year, \$50,000 00 the second year, and \$60,000.00 each year thereafter.

You are required to make an estimate of income and expense, in tabular form, for the first five years ending December 31, assuming the fire loss ratio to premium income earned to be 50% Show how much higher a ratio than 50% the company could bear each year without impairing its capital

Problem 21. A, B, C, and D form a syndicate for the purchase of coal mines owned by A, for the purpose of selling them to a

new corporation, The Northern Coal Company.

This corporation is formed with a stock capital of \$2,250,000 00, composed of 20,000 7% preferred shares of \$100 00 each, and 2,500 shares of common stock of \$100 00 each

The subscribers pay cash in full for 3,500 preferred shares, *B* paying for 1,500 shares, *C* for 1,000 shares, and *D* for 1,000 shares The remaining 16,500 preferred shares and also the 2,500 shares of common stock are to be transferred by the company to *A* as the purchase price of the properties

The agreement made by the members of the syndicate among themselves is that *A* is to keep 3,000 preferred shares as the actual price of the properties; that he is to transfer, as gifts to *B*, *C* and *D*, one preferred share for each share paid for by them; and that he is to donate to the corporation 10,000 preferred shares, which are to be sold and the proceeds credited to Surplus account. He is, further, to donate to the syndicate the 2,500 shares of common stock which he received

A market is to be made for this common stock, and when it is sold, the net proceeds are to be divided, as promotion profits, among all the members of the syndicate in proportion to their final holdings of preferred stock.

The common stock realized an average net price of \$90.00 per share The preferred shares, donated to the company, realized an average net price of \$102 00 per share.

Prepare the accounts of the syndicate, showing the distribution of profit on the sale of the common stock; and prepare the balance sheet of the corporation after the sale of the donated stock.

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